

**THE PERCEIVED IMPACT OF COGNITIVE DEVELOPMENTAL TRAINING ON
THE PERCEPTIONS OF UNIVERSITY AND DISTRICT TRAINED MENTORS**

A Dissertation

by

JENNIFER BETH WILLIAMS

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 2010

Major Subject: Educational Administration

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Approved by:

Co-Chairs of Committee,	Virginia Collier Elizabeth Foster
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ABSTRACT

The Perceived Impact of Cognitive Developmental Training on the Perceptions of University and District Trained Mentors. (May 2010)

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Co-chairs of Advisory Committee: Dr. Virginia Collier
Dr. Elizabeth Foster

The purpose of this study is to investigate differences found in self-efficacy perceptions regarding mentoring of trained mentors who were trained using a cognitive developmental model of mentor training, with mentor teachers who have received little or no training. The researcher was interested in whether the university based mentors, who participated in a cognitive developmental mentor training, would have a higher sense of self-efficacy and confidence in their mentoring as a result of the training than the campus mentors who received little or no training. Two groups of mentors participated in the study. One group consisted of university mentors who completed the Cognitive Developmental Mentor Training through Texas A&M University's Mentoring Research Collaborative for Learning and Development. The campus mentors were from a suburban school district and volunteered to mentor. They were required to attend a one time district mentor training session. The university and campus mentors completed three components during the study. The three components included a self efficacy survey, an interview using open ended questions, and the completion of a mentoring narrative.

The study followed a mixed method model. The researcher used both qualitative and quantitative methods to collect data. The researcher felt using both methods would offer the best explanation of the phenomenon of mentor self efficacy. The researcher used the basic

interpretive approach, which requires constant comparisons of each type of data. The data collected from the self-efficacy survey indicated little or no difference in self-efficacy perceptions in regards to mentoring between the two groups. However, there were differences in the qualitative pieces of the study. The level of knowledge regarding mentoring differed between the two groups resulting in differences in the participants approach and definition of mentoring.

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CHAPTER I

INTRODUCTION: MENTOR TRAINING AND SELF EFFICACY

Mentoring of new teachers by experienced teachers is just one way seasoned teachers can promote professional development. Within the last decade, the interest in mentoring in a public school setting increased with research regarding this topic addressing the impact of mentoring as well as the benefits.

Mentoring programs are present in most school districts. The purpose of these programs is to guide novice teachers through their first few years of teaching. Odell and Huling, (2000) define mentoring as “the professional practice that occurs in the context of teaching whenever an experienced teacher supports, challenges, and guides novice teachers in their teaching practice” (Odell & Huling, 2000, pg. xv). They define mentors as experienced teachers who have as part of their professional assignment the mentoring of preservice or beginning teachers as they are learning to teach.

Ganser, (1999) discussed two studies of K-12 teachers who served as mentors. In these studies Ganser found that experienced mentors often used metaphors to describe mentoring. Ganser believed using metaphors provides a useful tool in training mentors. These metaphors included raising a teenager; teaching a child to ride a bike; problem prevention; and /emergency service, such as a tug boat guiding a ship safely to port; giving directions, such as a directional compass for someone lost in the woods; and growth and creativity, as in watching a flower bloom. (Ganser, 1999). Ganser (1999) states:

This dissertation follows the style of *American Educational Research Journal*.

The figurative language used by teachers to describe their experience as mentors is useful in elucidating the complexities of mentoring and the mentoring relationship. For example, there is an important difference in the personal investment in mentoring as raising a child and someone else who sees mentoring as jump-starting a dead car battery” (Ganser, pg. 43).

Statement of the Problem

There are few well-defined mentor training programs, and of the few that do exist, many are just given in the course of one day. The state of Texas does not offer many formal regulations for the design or implementation of a mentor program. As a result, there are very few guidelines available to follow in designing a mentor program and therefore numerous ways to implement the programs. Stanulis’ research suggests “the conceptualization of what mentors should know and be able to do, however, is not commonly agreed on by those in the field. Consequently, preparing mentors can differ based on the induction purposes and the context in which the mentors develop their practices” (Stanulis & Ames, 2009, pg. 1). There is no clear understanding of what the role of a mentor should be or a suggested type of training. It is simply left up to each district to decide. Some mentor programs do not even require mentor training. However for those that do, once the mentors have completed these training sessions, there is no instrument in place to assess the effectiveness of the training. “Too often the role of the mentor is unspecified and ill conceived. In many instances, mentors are primarily charged with the fitting in aspect of support for beginning teachers” (Stanulis, Burrill & Thies Ames, 2007, pg. 143). Mentors are simply chosen according to similar teaching assignments. Formal training

appears to be optional depending on the district and its resources. Stanulis also suggests an alternative approach to mentoring by “providing mentors with substantial and targeted preparation. The ‘educative’ mentoring places emphasis on engaging beginning teachers in joint inquiry with a mentor to help novices understand the importance of learning from practice while providing tools useful for studying teaching” (Stanulis & Ames, 2009 pg. 1; Feiman-Nemser, 2001). Because there is little guidance from the state regarding “targeted preparation”, it is difficult to examine the impact district mentor preparation programs have on mentor and mentee success. For this reason, few researchers have been able to study how mentor self-efficacy perceptions are affected by these programs.

Mentoring programs are vital to a novice teacher’s success; however they also provide benefits for the mentors (Darling-Hammond, 2003). The benefits of mentoring do not stop with the mentees. Most commonly the purpose of these mentor programs is to guide mentees through their first few years of teaching. Bellon, and Bellon and Blank believe “organizations renew only if the individuals within them also renew...mentoring generates positive attitudes, future thinking, and commitment” (Blank & Sindelar, 1992, pg. 24; Bellon, Bellon, & Blank 1992). According to Darling-Hammond (2003) mentoring programs “provide a new lease on life for many veteran teachers. Veterans need on-going challenges to remain stimulated and excited about the profession” (Darling-Hammond, pg. 12).

Mentoring programs also have a direct impact on the teaching practices of mentors as well as nurturing their leadership skills. “Classroom teachers believe that they are much more effective because of what they learned as mentors, and those outside of the classroom believe that their mentoring experiences are a primary source of their effectiveness as leaders” (Moir & Bloom, 2003, pg. 59). Participation in a mentor program allows mentor teachers to critically

examine their own teaching. Poorly trained and untrained mentors miss out on this examination of learning. Orland-Barak and Rachamim (2009) examined the effects of reflection as a part of mentor preparation and its impact on the mentor and mentee. One of the mentors in their study changed her approach to mentoring as a result of her participation in the program. The mentor stated “having worked as a mentor of student teachers in my school for the past five years, I had never attributed much importance to the process of mentoring and how it can empower the mentee to shape her own learning” (Orland-Barak & Rachamim, 2009, pg. 605). This statement implied that it was unlikely that the experienced mentor would have gained a deeper understanding of the impact of the relationship between the mentor and mentee had she not participated in this mentor training. The mentor had served in the mentor role before yet had received very little training in how to effectively and appropriately mentor. The new learning would not have taken place if the mentor had continued to mentor as she did before the training.

Darling-Hammond (1995) believed that mentoring contributed to improving teaching practices of experienced teachers, but also helped address the increasing attrition rates of teachers. Darling-Hammond and McLaughlin (1995) stated that mentoring offers veteran teachers professional replenishment, contributes to the retention of the region’s best teachers, and produces teacher leaders with the skills and passion to make lifelong teacher development central to school culture. Ingersoll and Smith (2004) documented in their research that many educators have long-suspected a strong link between the perennially high rates of beginning teacher attrition and perennial teacher shortages that plague teaching. They believe the staffing problems are due to a “revolving door” as teachers are leaving the profession long before retirement. Effective mentor programs could combat this problem.

Giles, Davis and McGlamery (2009) studied induction/mentor programs that implemented the Comprehensive Teacher Induction Consortium. Mentors in their study reported that they were “able to retool, read, learn, expand their roles, and better understand the complexity of schooling during their mentor years” (Giles, Davis & McGlamery, 2009, pg. 45). However, while there is some research on the benefits to mentors and mentees such as improved practices and reduced attrition; there is little research on the impact of certain mentor training models on teacher’s self efficacy, such as those designed by Thies-Sprinthall and Sprinthall. Without clear guidelines for mentoring and induction programs, educators will possibly see more poorly trained and untrained mentors continue to blindly guide new teachers through the induction process and continue to see the attrition rate rise.

Establishing a Mentor Program

Administrators must hire the most qualified teachers and then equip them with the necessary tools for success. According to Ganser, mentoring programs are designed to offset beginning teaching as a disheartening ‘sink or swim’ experience that serves neither new teachers nor their students. Mentor programs will be integral parts of staff development in the future as the number of teachers entering or re-entering the profession increases due to a number of trends, such as retirements of teachers hired in the 1960’s and 1970s, increasing enrollments in many parts of the United States, and state and national initiatives to reduce class size (Ganser, 2002, Bradley, 1996; Darling-Hammond & Sclan, 1996). There is a stronger need for mentoring programs due to these trends. It is imperative that administrators and educators stay current on these trends and develop plans to counteract these changes. “Congress found that teachers without a mentoring program leave the profession at a rate nearly 70% higher than those who

participated in mentoring programs” (Jones & Pauley, 2003, pg. 24). Establishing a mentor program is now more important than ever.

Blank and Sindelar, (1992) discussed equipping the novice teacher for success through the establishment of an effective mentoring program. It was their contention that learning to teach takes years. While learning began in teacher preparation programs, it continued to a greater extent in the schools. According to Blank and Sindelar, (1992) “Schools that are successful in retaining new teachers and in helping them reach a high level of instructional competence do so by providing a systematic, orderly process of induction” (Blank & Sindelar, 1992, pg. 23).

Blank and Sindelar, (1992) further stated that while no ideal mentor-type existed, mentors should be highly proficient instructors with a strong base of pedagogical knowledge, successful teaching experience, and possess the motivation to pass their knowledge to the next generation of teachers. Once a mentor program was designed and implemented, it was important for administrators to choose appropriate mentors. Choosing unqualified mentors negated the benefits of a mentor program. Design, implementation and mentor assignment were key to the success of a mentor program.

Certain components in the mentor program must be included in the implementation. According to Heller and Sindelar (2003), districts that implemented a mentor program should consider four things: 1) the purpose of a teacher mentor program, 2) how to effectively start such a program, 3) the commitment needed to provide appropriate levels of administrative support for a successful program, and 4) awareness that there are pitfalls to avoid.

Heller and Sindelar (2003) also stated that there are six stages involved in starting a teacher mentor program. These stages included establishing a rationale, setting criteria for the selection of mentors, defining roles, inviting the mentors, training the mentors, and evaluating

the program. These stages are discussed in more detail in the literature review in the next chapter.

According to Heller and Sindelar (2003), once a mentoring program is established, a well-designed program benefited the mentors as well as the mentees. Mentoring programs positively affected teaching practices in mentors by providing relevant professional development opportunities, improving reflective practices and helping develop leadership skills.

Role of Mentors

While their roles as mentors are extensive, the primary role is to promote the novice teachers' professional competence and personal growth. Another important role is that of an instructional advisor. Blank and Sindelar, (1992) believed “mentors need to be familiar with the research on teaching as a means for validating current practice, seeing beyond limited perspectives, and suggesting innovative and alternative procedures” (Blank & Sindelar, 1992, pg. 21). This knowledge enabled mentors to provide critical, helpful feedback. Successful mentors generally were thoughtful practitioners, analytical, and possessed problem-solving abilities (Blank and Sindelar, 1992).

Mentor Preparation

Establishing a mentor program did not ensure success for the novice teacher, however, and selecting the appropriate mentor was important. According to Ganser (1996), many states, required specific training for mentor teachers, “which suggests that these roles call for knowledge and skills that teachers may not acquire from work experience alone” (Ganser, 2002, pg. 380). Mentor teachers needed to be adequately prepared to take on the role. Matching the mentor to the mentee was equally as important as preparing the mentor for the role. However, according to Ganser (2002), “the fact that many of them have not received formal training for

these roles suggests that their comfort level in being a mentor may reflect low expectations” (Ganser, 2002, pg. 384). Ganser also suggested that the absence of expectations and training for the mentors minimized the program’s effectiveness. He recommended that mentors receive the appropriate knowledge, skills and resources needed to effectively assume the role of mentor.

According to Ganser, the required knowledge mentors need should mirror the goals of the mentor program. He (1996), recommended mentor teachers obtain knowledge in the following areas: beginning teachers, teaching as a job, teaching as a career, adult development, teacher preparation, and curriculum and teaching innovations.

In addition to needing specific information, administrators should also provide opportunities for mentors to develop certain skills necessary to appropriately and effectively mentor novice teachers (Ganser, 1996). Ganser (1996) suggested the skills include conferencing, teacher observation, and problem solving. Mentors who were seasoned and master teachers often lacked the skills necessary to perform the role of mentor. Just because they were a good teacher did not mean they would succeed as a mentor. Administrators must prepare and provide opportunities for mentor teachers to gain the necessary skills.

Knowledge and skills were an important piece in mentor teacher preparation but if mentors lacked the resources to obtain the knowledge and skills, the likelihood of success was minimized. Ganser (1996) also offered a list of useful resources. These resources included: beginning teachers, mentoring, and research on beginning teachers and mentoring. Each of the resources listed above are easily accessed and are extremely helpful. If mentor teachers know what to expect from their mentee and in which areas they need help, the program will experience success.

Self-Efficacy

Self-efficacy is often defined as the belief that one is capable of performing in a certain manner to attain certain goals (Bandura, 1993). It is a belief that one has the capabilities to execute the courses of actions required to manage prospective situations. The discussion below describes the theories surrounding self-efficacy. According to Albert Bandura's research "efficacy beliefs influence how people feel, think, motivate themselves, and behave. Self-efficacy beliefs produce these diverse effects through four major processes. These include cognitive, motivational, affective, and selection processes" (Bandura, 1991, pg.118).

Gibson and Dembo's study, (1984) found that teachers who have a high sense of instructional efficacy devoted more classroom time to academic learning, provided students with difficulties learning with the help they needed to succeed, and praised those students for their accomplishments. The study also showed that teachers with low instructional efficacy spent more time on nonacademic pastimes and readily gave up on students and criticized their failures (Bandura, 1993; Bandura, 1997). Woolfolk and Hoys', (1990) study supported Bandura's findings when they reported that teachers' sense of personal efficacy affects their orientation toward the educational process as well as their specific instructional practices. Others believe "teachers with a strong sense of efficacy exhibit greater levels of planning and organization" (Tschannen-Moran & Woolfolk-Hoy, 2001 pg. 783; Tschannen-Moran & Woolfolk-Hoy, 1998). This link between instructional practices and student learning was further supported by Enderlin-Lampe, (2002). Enderlin-Lampe (2002) stated that in order to "enhance teacher efficacy, teachers must believe that their behaviors can effect the education of their students" (pg. 142). With teacher self-efficacy established as a vital component to effective teaching, only mentors with high self-efficacy should be chosen.

Adult Learning

Research revolving around adult learning suggests adult learners progress through a sequence of stages of cognitive development. These new theories offer implications for teachers supervising and mentoring. Reiman and Thies-Sprinthall, (1998) stated that there are a number of basic assumptions that underlie cognitive development. First, all people process experience through cognitive structures. This assumption takes a constructivist point of view that the mind is a “gradually developing erector set in which a person’s cognitions become more elaborated with increasingly complex scaffolds as a base to understand experience” (Reiman & Thies-Sprinthall, 1998, pg. 41).

Cognitive structures are also organized in a hierarchical sequence of stages or plateaus from the less complex to the more complex (Reiman and Thies-Sprinthall, 1998). Reiman and Thies-Sprinthall, (1998) referred to Dewey’s work describing students moving through cognitive stages in their intellectual growth and expanded on the idea by applying it to adults.

Each shift of stage within cognitive development represents a major transformation in how the person makes meaning from his or her experience. Reiman and Thies-Sprinthall, (1998) compared these transformations to that of the metamorphosis of the larva from caterpillar to butterfly. Like the butterfly, the growth is invariant and irreversible.

The next assumption made by Reiman and Thies-Sprinthall (1998), was that development is not automatic. People need appropriate interactions in their environment to foster development. The more experiences and the more interactions; the more growth is experienced. Without these interactions, a person will stabilize at one stage that is below their developmental potential. The same can be said for new teachers. The more exposure and interactions they experience; the more they will grow.

Finally, behaviors can be determined and predicted by a person's particular stage of development. However it is important to note that predictions are not exact. According to Reiman and Sprinthall, (1998) there are three domains of teacher cognitive development: conceptual complexity, ego complexity, and moral reasoning. Reiman and Sprinthall, (1998) contended, "Conceptual complexity refers to the ability to understand abstract concepts; ego complexity refers to levels of self-knowledge; and moral reasoning is the ability to make ethical judgments" (Reiman & Sprinthall, 1998, pg. 42). In their book *Mentoring and Supervision for Teacher Development*, Reiman and Sprinthall, (1998) discuss major theorist who explored the area of cognitive development. These theorists included David Hunt (conceptual), Jane Loevinger (ego), and Lawrence Kohlberg (moral). Each of these theorists provided different yet important perspectives on adult learning and will be discussed in Chapter II.

Purpose of the Study

The purpose of this study is to investigate differences found in the perceived self-efficacy of mentors who were trained using a cognitive developmental model of mentor training, with mentor teachers who have received little or no training.

Research Questions

1. What differences exist in the perceptions of teacher mentors who received cognitive developmental mentor training and those who received little or no training based on indicators for self-efficacy?
2. What differences exist in the perceptions of teacher mentors who received cognitive developmental mentor training and those who received little or no training based on responses to open-ended questions?

Operational Definitions

An understanding of the following terms is germane to an interpretation of the work in this study:

Mentor: an experienced/certified teacher who has as part of his or her professional assignment the mentoring of pre-service or beginning teachers as they are learning to teach.

Self-Efficacy: The belief in oneself to have the power or capacity to produce a desired effect.

Mentor Self Efficacy: The belief by mentors that they have the capacity to be a good mentor who will adequately help a mentee grow and as a result of their mentorship improve the mentees teaching practices.

Cognitive Developmental Mentoring: An expansion of cognitive development through the introduction of five interacting conditions required for developmental growth in teachers as adult learners. The conditions include role taking, reflection, balance, continuity, and support and challenge.

Mentee: Beginning teachers in the profession

Cognitive Developmental Theory: the construction of thought processes, including remembering, problem solving, and decision-making. Also refers to how a person perceives, thinks, and gains understanding of his or her world through the interaction of genetic and learned factors.

Conceptual Levels: refers to a person's current preferred style of solving problems in human interactions.

Ego Development- interpersonal growth, frames how decisions are made; the part of the personality that acts as an executive: coordinating, choosing, and directing a person's actions.

Ethical Development: how a person thinks about problems of social injustice.

Professional Development: a comprehensive, sustained, and intensive approach to improving teachers' and principals' effectiveness in raising student achievement

University mentor: mentors who have completed cognitive developmental training through Texas A&M University's Mentoring Research Collaborative for Learning and Development and who served as mentors as a part of the Teacher's Internship and Induction program through the university.

Campus mentor: mentors from a suburban school district who were assigned to mentor new teachers in addition to their regular teaching duties.

Assumptions, Limitations and Delimitations

Mentoring means different things to different people. Bias and past experiences shape the way a teacher views mentoring. Mentors who have been trained will have a different definition than those who have not received training. These individual differences were not explored in this study.

Another limitation is that district mentors had different job assignments and thus had different responsibilities. University mentors were strictly mentors and had no other teaching responsibilities. Therefore their perceptions of their role as mentor may have differed from district mentors.

Another limitation is that the researcher did not collect data in the same fashion from the university and the campus mentors. While both groups answered the same questions, the university mentors were interviewed and the campus mentors responded to a written questionnaire. While the researcher was cautious and did not probe in the face-to-face interviews, mentors may have responded differently to written as opposed to oral questions.

The final limitation is the assumption that the mentors were honest in completing their interviews, self-efficacy instruments, and mentoring self-analysis.

Significance of the Study

The study discusses the differences in the perceived self efficacy of mentors who were trained using a cognitive developmental model and those who were not and the impact the training had on the mentors and mentees. It will shed light on the issues surrounding the effectiveness of mentor and induction programs and possibly increase the capacity to impact the mentee teachers. This study provides insight into the impact of cognitive developmental mentoring on a mentor's self-efficacy and will aid in the development of a better design and more effective implementation of a mentor program in school districts which can aid in the decrease of attrition.

Organization of the Study

Chapter I introduced the reader to the research problem and the importance of the research. It identified the research questions, operational definitions, general methodology, significance of the study and the limitations of the study.

Chapter II presents a literature review of mentoring and self-efficacy. It includes a description of mentoring programs, skill acquisition, adult learning, cognitive developmental mentor training, and self efficacy.

Chapter III describes the methodology that was used in this study including the self-efficacy instrument, interviews, and mentoring narrative.

Chapter IV presents the findings of the survey and the qualitative information.

Chapter V summarizes the study's findings and provides recommendations and implications for the implementation of future mentoring programs.

CHAPTER II

THE REVIEW OF LITERATURE

Introduction

Mentoring of new teachers by experienced teachers is a powerful way to foster professional development in teachers in each stage of their career (Blank & Sindelar, 1992). Within the last decade, the interest in mentoring in a public school setting has increased. Research regarding mentoring addressed the impact of mentoring as well as the benefits. According to Mihans, (2008), “teaching is the only profession that requires the same responsibilities of its beginning practitioners as it does of its masters” (pg. 763). Johnson (2001) states “teaching has been a career in which those with the least experience face the greatest challenge and most difficult responsibilities” (Johnson, 2001, pg. 44). Some researchers, such as Huling and Resta, believe mentoring leads to teacher renewal. Huling and Resta (2002) believe mentoring forces mentors to be reflective about their “own beliefs about teaching, students, learning, and teaching as a career” (pg. 3). This reflection also leads to teacher renewal. The mentor often feels reenergized and gets excited about teaching again. Huling and Resta also suggested that when mentors analyze and talk about teaching it provides a natural opportunity to deepen teaching sensitivity and skill (Huling & Resta, 2002). The novice teacher benefited from reflection, as did the mentor. The mentors were forced to analyze their own teaching practices through personal journaling and responding to mentee journals. According to Huling and Resta, (2002) mentor teachers often felt an increase in their own self-esteem as well as feeling empowered. Huling and Resta’s study provided evidence mentoring can also benefit mentors.

Theories and Definitions

Adult Learning

Researchers have studied learning and development and have discovered several stages of development. Jean Piaget's work is an example. However, until recently few researchers included developmental growth in adults, and while there was some agreement that there was quantitative growth in adults, few researchers devoted time to this type of study (Reiman & Thies-Sprinthall, 1998).

John Dewey was an educational theorist and philosopher. He believed the learner needed careful, guided experiences, or active learning in order to grow. This belief fostered the notion that educators were "responsible for recognizing in the concrete what surroundings are conducive to having experiences that lead to growth" (Dewey, 1938, pg. 40). Like many other researchers and theorists, Dewey believed learners must progress through stages in growth and development. For Dewey, "the role of the educator was to promote growth and development through active learning in the form of curriculum that balanced experiential learning with careful analysis and reflection on the experiences" (Dewey, 1938, pg. 102). While Dewey's research is dated, many recent researchers, including Jean Piaget, Jane Loevinger, Lawrence Kohlberg, David E. Hunt and Alan Reiman and Lois Thies-Sprinthall, have furthered the study of adult learning by using Dewey's research as a foundation upon which to build.

Alan Reiman and Lois Thies-Sprinthall

Alan Reiman and Lois Thies-Sprinthall, (1998) stated that there are a number of basic assumptions which underlie cognitive development in adults. First, all people process experience through cognitive structures. This assumption takes a constructivist point of view that the mind is a "gradually developing erector set in which a person's cognitions become more

elaborated with increasingly complex scaffolds as a base to understand experience” (Reiman & Thies-Sprinthall, 1998, pg. 41). Second, Reiman and Thies-Sprinthall state, cognitive structures are organized in a hierarchical sequence of stages or plateaus from the less complex to the more complex. Reiman and Thies-Sprinthall, (1998) referred to John Dewey’s work describing students moving through cognitive stages in their intellectual growth and expanded on the idea by applying it to adults. Third, each shift in stage represents a major transformation in how the person makes meaning from his or her experience. Reiman and Thies-Sprinthall (1998) compared these transformations to that of the metamorphosis of the larva from caterpillar to butterfly. Like the butterfly, the growth is invariant and irreversible.

Reiman and Thies-Sprinthall (1998) further assume that development is not automatic. People need appropriate interactions in their environment and the more experiences and interactions they have, the more they grow. Without these interactions a person stabilizes at a stage that is below their developmental potential. The same can be said for new teachers. The more exposure and interactions they experience, the more they will grow. Behaviors can be determined and predicted by a person’s particular stage of development. However it is important to note that such predictions are not exact. Reiman and Sprinthall discussed these stages.

According to Reiman and Sprinthall, (1998) there are three domains of teacher cognitive development: conceptual complexity, ego complexity, and moral reasoning. “Conceptual complexity refers to the ability to understand abstract concepts; ego complexity refers to levels of self-knowledge; and moral reasoning is the ability to make ethical judgments” (Reiman & Sprinthall, 1998, pg. 42). Other theorists in the area of cognitive development of adults are David E. Hunt, Jane Loevinger and Lawrence Kohlberg, who each fall into one of the three domains listed above. Hunt focuses on the conceptual complexity, Loevinger focuses on the ego

complexity and Kohlberg focuses on moral reasoning. Reiman and Thies-Sprinthall expanded on each of these theories and ideas and its relationship to cognitive development.

Conceptual Complexity

David E. Hunt's 1971 study examined teacher development at a conceptual level. Reiman and Thies-Sprinthall discussed Hunt's study at length. According to Reiman and Thies-Sprinthall (1998), the conceptual level refers to a person's current preferred style of solving problems in human interactions; it is not a permanent classification but a description of interpersonal development (Reiman & Thies-Sprinthall, 1998). Hunt's study (1971) found that teachers at a more complex conceptual level were more effective teachers and were more tolerant of ambiguity. Further, Hunt found teachers at a lower conceptual level were more concrete in their thinking and less responsive to students. Hunt termed the behaviors he found in more complex functioning as the "new 3 R's- responsiveness, reciprocity, and reflexivity" (Reiman & Thies-Sprinthall, 1998, pg. 44; Hunt, 1971).

Hunt formulated a three-stage model of conceptual levels. Stage A, or Concrete conceptual level, is the lowest level. Teachers at this level are very concrete and usually prefer the "tried and true" method. These teachers typically teach the same lessons in the same manner from year to year regardless of changes in curriculum. Teachers at this level prefer high structured learning activities.

Stage B is the concrete/abstract conceptual level; the teachers have a greater awareness of alternative strategies and a growing awareness of the importance of feelings. Teachers in Stage B are also more open to new ideas and are able to tolerate some ambiguity. Stage B teachers often include teachers who are seeking to improve their current practices but do not always know the path to follow.

Stage C, the abstract conceptual level is the third and highest level in Hunt's model. Teachers at this level are more likely to be risk takers and value collaboration as well as have the ability to integrate complex intellectual and interpersonal functions. Master teachers fall into this level. Hunt also believes the best mentor teachers are also at this level and should seek to bring their mentees to this level. Depending on their mentee's level this development may take a great deal of time and effort (Hunt, 1971).

David Hunt also felt we must become familiar with "matching statements" (Hunt, 1982), or "if...then" statements. Hunt suggests that we become "aware of this intuitive matching process because it is what learning style ideas understand" (Hunt, 1982, pg. 88). Using the "if...then" principle helps evaluate the various learning styles. Hunt states, "*if* a person is low in CL (Conceptual Level), *then* that person will learn better in a highly structured environment; *if* a person is high in CL, *then* the person will learn best in a low structure environment, or learn equally well in a variety of environments" (Reiman & Thies-Spinthall, 1998, pg. 49; Hunt, 1982). Hunt's theory forces mentors to examine the importance of differentiating their strategies to more effectively meet the learning needs of new teachers. Reiman and Thies-Spinthall believe Hunt's conceptual complexity is only one domain in cognitive development. The next required domain is ego complexity. Reiman and Thies-Spinthall were drawn to Jane Loevinger's work on ego development.

Ego Complexity

Jane Loevinger focused her research on the ego development. Her research revolved around the understanding of the development of ego or intrapersonal growth defined as knowledge of one's self (Loevinger, 1970). Loevinger's "ego" is the part of the personality that acts as an executive: coordinating, choosing, and directing a person's actions. Loevinger's

theory describes how a person moves from a symbiotic and impulsive ego level, to conformists ego levels and finally to autonomous ego levels. The symbiotic and impulsive levels are levels when the person is dependent on others for decisions. Teachers in the conformists level frame their reasoning upon what is socially acceptable with little awareness of personal choice. Teachers who can reconcile contrasting or conflicting ideas and have high tolerance for ambiguity fall into the autonomous levels.

Loevinger (Rich & DeVits, 1994) suggests that there are “well-adjusted” people in all of her stages and that her scale should not be taken as a “moral IQ index and that we live in a conformists society” (pg. 92). Loevinger believes “no behavioral task can be guaranteed to display just what one wants to know about ego level. Neither a structured test nor an unstructured test carries a guarantee... There is always a chance that a person can conceal all...” (Loevinger, 1970, pg. 34).

Loevinger believed very few adults consistently function at higher levels of ego complexity. David E. Hunt’s theory (conceptual) looked at interpersonal development, or how we deal with others. Loevinger’s theory (ego) focused on intrapersonal growth, or how we deal with ourselves. The final domain in Reiman and Thies-Sprinthall’s cognitive development is moral reasoning. They expanded on Lawrence Kohlberg’s theory of moral and ethical development.

Moral and Ethical Development

Lawrence Kohlberg’s work focused on how a person thinks about problems of social justice otherwise known as moral/ethical development. (Kohlberg, 1969). Kohlberg’s model is divided into three levels. The first level is the pre-conventional level. According to Kohlberg, (1969) teachers’ moral judgment at this level resides in external happenings rather than in

persons or standards. This level includes two stages. Stage one is concern about self. The teachers feel their actions have physical consequences. Stage two of this level is a one-way concern about another person.

Kohlberg's second level is the conventional level. The moral judgment at this level resides in performing good or right roles, in maintaining the conventional order, and in meeting the expectations of others. This level also has two stages. The first stage is the teachers' concern about groups of people and conformity to group norms. The second level in this stage is a concern for order in society.

The third and final level of Kohlberg's model is the post-conventional level. Reiman and Thies-Sprinthall, (1998) believe the moral judgment at this level resides in commitment to shared or sharable rights, principles, or duties. Like the other two levels, level three also has two stages. The first stage is the social contract, legalistic orientation, where there are no legal absolutes. The second stage is the universal ethical principles. What is right is a decision of one's conscience, based on ideas about rightness that apply to everyone.

Although Kohlberg originally believed that adult growth "did not meet the fundamental qualitative shift and could therefore only be considered minor quantitative growth...he eventually revised his scoring system and amended his theory... that some adults continued to make stage and sequence change up" (Reiman & Thies-Sprinthall, 1998, pg 68; Kohlberg, 1969). With this shift in this thinking, Kohlberg began to express concern for the role of teacher training in the sphere of moral education. Barry Charzan (1985) believes that Kohlberg had "two aspects of teacher training stressed: 1) a concern for the philosophic understanding by the teacher of the theoretical bases of the moral sphere and of cognitive-developmental moral theory and 2)

exercises and case studies in translating this theory into the practical language and experiences of teachers” (Chazan, 1985, pg. 89).

Like Hunt and Loevinger, Kohlberg believed one must move through stages for growth to occur. Hunt focused on our understanding of other people, Loevinger on our understanding of ourselves, and Kohlberg took it a step further by focusing on the understanding of social justices. Other theorists have expanded on each of their frameworks.

Lois Thies-Sprinthall & Norman Sprinthall

While Hunt, Loevinger, and Kohlberg all believe in cognitive development, each uses a different framework to describe their theories. Lois Thies-Sprinthall and Norman Sprinthall revisited many of these theories and applied them to mentoring. Thies-Sprinthall and Sprinthall, (1987) found that many teachers were burning out simply because their teaching, like that of most teachers, was a horizontal and repetitive experience. Their premise was that if the experiences were repetitive, there was little possibility of intellectual and personal growth. Their study referred to John Dewey’s belief that if a “person has extracted as much meaning as possible from experience, new growth will depend upon new experiences” (Reiman & Thies-Sprinthall, 1998, pg. 66; Dewey, 1938). They also included Dewey’s famous interview question “Have you taught ten years or one year ten times?” to help illustrate the significance of educative experiences needed for personal growth (Dewey, 1938). According to Thies-Sprinthall and Sprinthall’s study “role-taking, increased responsibility and reflection replaced successive repetition in the lives of experienced teachers of whatever age” and thus promote cognitive growth. (Thies-Sprinthall & Sprinthall, 1987, pg. 87).

Thies-Sprinthall and Sprinthall (1987) discussed the weaknesses of most developmental theories yet believed Hunt, Loevinger and Kohlberg’s models did have some merit. They

believed the idea of conceptual development in Hunt's theory could be modified. The study suggested teachers could move through developmental stages through planned educational programs, which they called "Deliberate Psychological Education" (1987). The programs included specific elements; significant role-taking experiences in complex human "helping" tasks, careful reflection and reading, balance between action and reflection, continuity, and instructor support and challenge (1987). Thies-Sprinthall and Sprinthall believe mentoring can provide the necessary experience for veteran teachers to foster developmental growth. An important element of mentor training of experienced teachers presented a classic role-taking opportunity. Their work indicates that mentoring represents a major opportunity for teacher revitalization through the role of supervision. Their model suggests when experienced teachers are trained using the elements discussed above adults can develop or developmental growth can be restarted.

Developmental Growth

This developmental growth was expanded upon in Alan Reiman and Lois Thies-Sprinthall's study (1998). Through their research using Dewey's framework for growth Reiman and Thies-Sprinthall (1998) found that students typically had more developmental growth than adults. Therefore Lois Thies-Sprinthall and Norman Sprinthall refined the framework by adding five interacting conditions. According to Thies-Sprinthall and Sprinthall (1987), if "we wish to raise the cognitive developmental level of teachers as adult learners these five conditions are requisite" (Reiman & Thies-Sprinthall, 1998, pg. 72). These five conditions are role taking, reflection, balance, continuity and support and challenge.

Before beginning the discussion on the elements of developmental mentoring, time must be devoted to discussing the underlying assumptions of cognitive developmental theory so that a

distinction can be made between cognitive development and other adult learning theories. The first assumption is that all people process experience through cognitive structures. This assumption is a constructivist point of view that the mind is a “gradually developing erector set in which a person’s cognitions become more elaborated with increasingly complex scaffolds as a base to understand experience” (Reiman & Thies-Sprinthall, 1998, pg. 41). The second assumption is that cognitive structures are organized in a hierarchical sequence of stages or plateaus from the less complex to the more complex. Reiman and Thies-Sprinthall, (1998) referred to Dewey’s work describing students moving through cognitive stages in their intellectual growth and expanded on the idea by applying it to adults. The third assumption is each shift in stage represents a major transformation in how the person makes meaning from his or her experience. The next assumption is that development is not automatic. People need appropriate interactions in their environment. The more experiences and the more interactions the more growth is experienced. Without these interactions a person stabilizes one stage below their developmental potential. New teachers follow the same progression so the more exposure and interactions they experience, the more they will grow. Finally, the fifth assumption states that behaviors can be determined and predicted by a person’s particular stage of development. However, it is important to note that predictions are not exact. These assumptions guide the cognitive developmental theory.

The first of Alan Reiman and Lois Thies-Sprinthall’s five interacting conditions is role-taking. In their discussion on the condition of role taking, Reiman and Thies-Sprinthall discussed George Herbert Mead’s work on the subject. He indicated the “concept of social role-taking could effect moral/ethical development. By placing a person in a more complex helping role, the person would need to construct new thoughts and behaviors to meet the new task

demands. Increased responsibility would also be involved in the new role” (Reiman & Sprinthall, 1998, pg. 72; Mead, 1934). The mentoring process is designed to develop both the mentor and mentee; therefore the mentor must be willing to obtain the necessary skills. Norman Sprinthall and Lois Thies-Sprinthall believe the act of mentoring required a role change for teachers. They also believe “effective supervision is a complex human helping task requiring higher-order instructional skills than classroom teaching” (Thies-Sprinthall & Sprinthall, 1987, pg. 73). In their article, *Experienced Teachers: Agents for Revitalization and Renewal as Mentors and Teacher Educators*, Thies-Sprinthall and Sprinthall discussed the adult learning theories and their contribution to the developmental mentoring process. They devoted a portion of their article to the training of mentors and teacher educators. They believe training is vital to the success of the program. The authors suggested the mentors complete a year long training, which required the mentors to meet three hours per week to prepare them to assume their new role. To increase the opportunity for the mentors they created a new, higher level of role-taking by training mentors to become mentor trainers themselves. These mentors were called school-based mentor teacher educators. By increasing the level of role-taking the mentors were increasing their skills as a mentor and thus providing more support to their mentor. Sprinthall and Thies-Sprinthall suggests, “learning to perform the new and more complex educational role promoted their own psychological development. In a manner similar to studies with secondary pupils and college students, the mentors developed more self-confidence as learners, more perspective-taking ability, and a greater ability to abstract meaning from experience” (Thies-Sprinthall & Sprinthall, 1987, pg. 74). The study suggested the effects of the mentor teacher educator role were more powerful than the mentor role.

Developmental mentoring design devotes equal time and effort to the mentor and mentee. They have a symbiotic relationship. The goal of mentoring is to develop and grow teachers, moving them to higher cognitive levels and thus enhance student performance. This growth occurs in both the mentor and mentee and is therefore beneficial to both. Assuming the role of mentor is far more powerful than any other role a veteran teacher may play. Other roles simply are a shifting of responsibility toward a particular task, they do not promote growth. As teachers increase their experience they are often asked to assume various leadership roles, such as department head, team leader or specialist, however, none of these roles are designed to develop their teaching skills, or increase their cognitive, conceptual or moral level (Thies-Sprinthall & Sprinthall, 1987). The roles are not designed to develop, they are simply additional tasks added to their already lengthy list of responsibilities. Role-taking, requires placing a teacher in a more complex helping role, and would therefore require the teacher to construct new thoughts and behaviors to meet the new demands of the role. Role-taking, as a part of the developmental mentoring process contributes to the mentor teachers' growth and development. Its very nature is to nurture and mold the mentor so that in turn they might nurture and mold their mentee. Growth producing experiences are an important component of role taking for teachers. Role taking is the condition that requires action. Teachers must participate in constructive role taking to aid in their development; however, action without reflection has little impact.

The second condition in Reiman and Thies-Sprinthall's study is reflection. Reflection, helped the new experiences gained as a result of role taking, make an impact on a mentor teacher's overall development. Reflective practice is a key component in adult development. Without it, the movement to higher cognitive levels is almost impossible. Dewey used the example of a veteran teacher to point out the importance of reflection. The teacher stated they

had taught for ten years, Dewey asked, “Was it ten years or one year ten times over (Dewey, 1938)?” Dewey was really asking if the teacher reflected on the experience or merely repeated the same activities over again. Paulo Freire (1986) noted “action without reflection leads to activism while reflection without action leads to pedanticism” (as quoted by Reiman & Thies-Sprinthall, 1998, pg. 73). There must be a balance between action and reflection.

Guided reflection helps the person extract meaning from the experience. In their book *Reflective Practice to Improve Schools*, York-Barr and others state, “reflection is viewed as an active thought process aimed at understanding a subsequent improvement” (York-Barr, Sommers, Ghore & Montie, 2001, pg. 3). The authors also suggest reflection is a commitment to continuous learning and improvement, and one’s willingness to commit indicates the acceptance of responsibility for one’s professional practice. Mentors and mentees must both demonstrate reflective practice, which is a skill that must be taught. Reflection is deliberate thinking, and requires “purposeful slowing down of life to find time for reflection” (York-Barr et al., 2001, pg. 6). York-Barr and others also offer a comprehensive definition of reflective practice. The pieces include six steps in reflective practice. These six steps include a deliberate pause, open perspective, thinking process, examination of beliefs, goals and practices, new insights and understanding, and finally actions that improve learning (York-Bar et al., 2001). Mentors and mentees must first stop and think about their teaching (deliberate pause), then open their minds to other points of view (open perspective) and then process their thoughts regarding these issues (thinking process). The next step in the reflective practice process requires the mentor and mentee to examine their beliefs, goals and teaching practices (examination of beliefs). Once this occurs, new insights and understanding (new insights) will emerge which will lead to an action plan (action that improve learning) to improve their learning. Without these steps, true reflection

cannot occur. As mentioned earlier, reflective practice is a learned skill. Both the mentor and mentee must be taught the reflective process in order to see and map growth. While oral-learning discussions will occur between the mentor and the mentee, true reflection will not take place unless the experiences and discussions are included in journals so that they may be revisited. Reflective practice will help replace the repetition discussed above in the experiences of the veteran teacher. While role taking and reflection are both key for growth, it is the proper balance of the two that moves a teacher to the next level of growth.

Reiman and Thies-Sprinthall's third condition for developmental growth is balance. Reiman and Sprinthall believe that the "cycles of action and reflection need to be balanced to promote an effective interplay" (Reiman & Thies-Sprinthall, 1998, pg. 73). Reiman and Sprinthall also felt the "action-reflection interplay on a weekly basis, for example, allows for clarification of puzzlements and reflection on new issues without long time lags" (pg. 73). In many cases, teachers who are more than willing to take on a new role resist the reflective portion of the process and therefore never move to the next stage. Others spend time reflecting on their experiences yet do not seek out opportunities for additional role taking experiences. There must be a balance between the two conditions in order for the teacher to see growth. This balance allows for a greater effectiveness in the last two conditions.

Continuity is the fourth condition necessary for growth. Without the balance in condition three and condition four, continuity, would not be possible. Reiman and Sprinthall found that to "achieve the complex goal of impacting cognitive structures in ego, conceptual and moral/ethical domains required a continuous interplay of action and reflection. Usually at least one semester was needed for significant structural growth to occur" (Reiman & Thies-Sprinthall, 1998, pg. 73). Jean Piaget (Piaget & Inhelder, 1969) suggests structural change results in his classic

assimilation/accommodation process. According to Piaget, there are times when unfamiliar problems arise and we must employ a new method instead of using the same problem solving method we have used in the past. These new situations are called “knowledge perturbation.”(1969) It is in this “knowledge perturbation” that Reiman and Sprinthall feel “our current system becomes inadequate, inefficient, and effective... and our cognitions need to adapt, to accommodate, to use new strategies of problem solving” (pg. 73). The new strategies are not added to our old strategies; they replace them. According to Reiman and Thies-Sprinthall, this continuity does not happen quickly but happens over time. Continuity is vital to growth regardless of the time required to make the change. The final condition will determine whether any of the new cognitions are truly gained and implemented.

The fifth and final condition is support and challenge. Support and challenge is one of the most difficult conditions in adult learning. Reiman and Thies-Sprinthall suggest adult learners experience a disequilibrium between old and new learning. During such a disequilibrium a person’s affective (emotional) process become more fully engaged. It is precisely at such a point that cognition and affect intersect (Reiman & Thies-Sprinthall). This intersection is comparable to Lev Vygotsky’s “zone of proximal growth/development” (Vygotsky, 1978). Therefore, it is essential that the mentor and mentee be on different developmental levels, and the mentor is aware of the mentee’s lower level. Reiman and Thies-Sprinthall describe this zone as “an arena of thought and feeling that is slightly ahead of the current equilibrium” (pg. 74). Vygotsky defines the zone as the “distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Reiman & Thies-Sprinthall, 1998, pg. 77; Vygotsky, 1978). Reiman and Thies-Sprinthall believe cognitive

growth occurs in the zone and thus requires both support and challenge. Vygotsky stressed the critical importance of “dialogue and discussion with others as central to the growth process. Supportive social interactive talk would promote growth” (Reiman & Thies-Sprinthall, 1998, pg. 77). Vygotsky also believed what a person could do with assistance of others was considered more indicative of mental development than what he or she did alone (Vygotsky, 1978). This is why challenge is such a difficult yet important condition in the developmental mentoring process. The mentor must be willing to challenge the mentee to bring them to the next level. The mentor needs to be at a higher level so that he or she can provide the necessary challenges for the mentee in an effort to move them to a higher level. What makes this condition difficult is the mentor’s ability to recognize the level of their mentee and their ability to provide the appropriate challenge. The mentor must be prepared to assume this role of responsibility. Each mentee requires a different amount of support versus challenge depending on which stage of development they have reached.

One cannot assume that mentors will be able to identify and understand each of the five conditions. They must be trained and acquire the necessary skills to carry out their duties as mentors.

Skill Acquisition

In order to move from an understanding of learning to training design, time must be devoted to the necessary components for training. The information above discusses how adults learn, however the design of the training used to acquire the learning and growth is also important. Bruce Joyce and Beverly Showers’ book *Student Achievement Through Staff Development* (1988), discuss the necessary training components to ensure true knowledge acquisition among teachers. Joyce and Showers suggests a training pattern of Theory-

Demonstration-Practice-Feedback combination, “when well implemented, allows most teachers to learn even the very complex skills that enable them to use the powerful models of teaching, and why practice with companionship is necessary for those skills to be adapted and incorporated into the active repertoire of teachers” (pg. 95).

The knowledge and awareness of educational theories is the first component in skill acquisition. According to Joyce and Showers an “exploration of theory through discussions, readings, lectures, etc. is necessary for an understanding of the rationale behind a skill or strategy and the principles that govern its use. The study of theory facilitates skill acquisition by increasing one’s discrimination of the demonstrations by providing a mental image to guide practice and clarify feedback, and by promoting the attainment of executive control” (Joyce & Showers, 1988, pg. 68). Teachers need to understand the origin of new information before they embrace the knowledge.

Joyce and Showers also believe understanding of the theory is reinforced through demonstration. Demonstrating or modeling a new skill or newly gained knowledge will greatly increase the level of learning. Demonstration and explanation should be combined with the discussion on relevant theories. Mentee teachers must be able to demonstrate the new skill through simulation before putting it into practice which leads into the next component.

The third component is the practice of the skill in simulated conditions. Joyce and Showers believe “the closer the training approximates the workplace the more transfer is facilitated” (pg. 68). The amount of practice depends on the complexity of the skill. If the skill is similar to another skill the teacher is familiar with, the less practice they will need.

The final component of training is feedback. Teachers can receive feedback from their mentors or from fellow teachers; however the feedback needs to occur as soon as possible

following practice. The feedback component is similar to the support and challenge condition in developmental growth. Mentees need to hear their mentor's perception of their practice. The feedback should be quick and specific. Skill acquisition is important for mentor success, however, establishing an effective program requires more than just training.

Establishing a Mentor Program

Administrators must hire the most qualified teachers and then equip them with the necessary tools for success. According to Ganser, mentoring programs are designed to offset beginning teaching as a disheartening 'sink or swim' experience that serves neither new teachers nor their students. Mentor programs will be integral parts of staff development in the future as the number of teachers entering or re-entering the profession increases due to a number of trends, such as retirements of teachers hired in the 1960's and 1970s, increasing enrollments in many parts of the United States, and state and national initiatives to reduce class size (Ganser, 2002; Bradley, 1996; Holloway, 2001). There is now a stronger need for mentoring programs due to these trends. It is imperative that administrators and educators stay current on these trends and develop plans to counteract these changes. "Congress found that teachers without a mentoring program leave the profession at a rate nearly 70% higher than those who participated in mentoring programs" (Jones & Pauley, 2003, pg. 24). Establishing a mentor program is now more important than ever.

Blank and Sindelar, (1992) discuss equipping the novice teacher for success through the establishment of an effective mentoring program. An effective mentoring program also assists in moving mentoring theory into practice. It is their contention that learning to teach takes years. While learning begins in teacher preparation programs, it continues to a greater extent in the schools. According to Blank and Sindelar, (1992) "Schools that are successful in retaining new

teachers and in helping them reach a high level of instructional competence do so by providing a systematic, orderly process of induction” (Blank & Sindelar, 1992, pg. 23). Blank and Sindelar, (1992) further state that no ideal mentor-type exists, however, mentors should be highly proficient instructors with a strong base of pedagogical knowledge, successful teaching experience, and possess the motivation to pass their knowledge to the next generation of teachers. Once a mentor program is designed and implemented, it is important for administrators to choose appropriate mentors. Choosing unqualified mentors will negate the benefits of a mentor program. Design, implementation and mentor assignment are key to the success of a mentor program. Certain components in the mentor program must be included in the implementation.

According to Heller and Sindelar, districts that implement a mentor program must consider four things: 1) the purpose of a teacher mentor program 2) how to effectively start such a program 3) the commitment to provide appropriate levels of administrative support needed for a successful program and 4) be aware that there are pitfalls to avoid.

Heller and Sindelar (2003) also believe there are six stages involved in starting a teacher mentor program. These stages include establishing a rationale, setting criteria for the selection of mentors, defining roles, inviting the mentors, training the mentors, and evaluating the program (Heller & Sindelar, 2003). According to Heller and Sindelar (2003), the first stage, establishing a rationale, involves conducting a needs assessment to determine the specific needs of the new teacher. These needs then become the basis for the rationale for the program. Their second stage, setting criteria for the selection of mentors, can be accomplished by creating a committee composed of faculty and administrators to determine requirements. Heller and Sindelar (2003) also suggest allowing new teachers to have input on the selection criteria because “their needs

will strongly influence the nature of the program” (pg. 11). Defining roles, which is stage three, requires the same committee discussed above to design or create the roles. Heller and Sindelar suggested these roles might include the following; to increase the mentee’s instructional competence, increase the mentee’s self confidence, be a resource to the protégé in the areas of discipline, classroom management, curriculum, and lesson planning, to be a resource in the areas of school policy, procedures and routines, and to be a friend. The fourth stage, inviting the mentors, is necessary because the invitation “communicates that those invited are viewed as effective teachers, whose experience and skills will be most helpful in working with new teachers in the school. While potential mentors should feel honored to be invited, they should not be obligated to accept the assignment” (Heller & Sindelar, 2003, pg. 13). Heller and Sindelar believe the fifth stage of training mentors, is a necessary component to help mentors understand the needs of beginning teachers. Heller and Sindelar suggested several items that should be included in the training which include an “overview of the characteristics of a novice teacher, a discussion of mentor roles and responsibilities as defined by the district, guidelines for classroom visitations between mentors and protégés, a review of research on effective instruction, a review of stages of the mentor relationship and how long that relationship will last, and clarification of the evaluations role of the mentor” (Heller & Sindelar, 2003, pg. 14). The final stage is evaluation of the program. Heller and Sindelar (2003) believe this should include a formal written evaluation by the mentors of the training, at the end of the first quarter, and at the end of the year by both the mentors and mentees.

Once a mentoring program is established, a well-designed program will benefit the mentor as well as the mentee. Mentoring programs positively affect teaching practices in

mentors by providing relevant professional development opportunities, improving reflective practices and helping develop leadership skills.

Benefits of Mentoring Program

Often administrators assume that only the novice teacher will benefit from the program, but there is evidence that both the mentor and the mentee benefit from the program. The veteran teachers learn that the program actually provides positive professional growth for them.

According to Huling and Resta, (2002) mentors admitted that the program: 1) forced them to focus on and improve their own classroom teaching skills 2) made them aware of the need for educators to communicate with each other and 3) helped them better understand the principal and central office supervisor's role (Huling & Resta, 2002). Since teachers frequently express dissatisfaction with the relevance of professional development offered them, the research indicates that a mentoring program is one of the most effective ways to help teachers, both novice and veteran, grow. Teachers must continue to take advantage of professional development opportunities in order to revitalize and renew their passion to teach.

According to Blank and Sindelar's (1992) research, "organizations renew only if the individuals within them also renew" (Blank & Sindelar, 1992, pg. 23; Bellon & Bellon, 1992). Renewal is an important process for teacher morale and job satisfaction, and can often be obtained through professional development opportunities. "Mentoring generates positive attitudes, future thinking, and commitment, and schools involved in mentoring programs have environments conducive to long-term professional development" (Blank & Sindelar, 1992, pg. 25).

In "Teacher Mentoring as Professional Development", Heller and Sindelar, (2003) suggest several benefits to mentors such as professional competency, reflective practice, renewal,

psychological benefits, collaboration and contributions to teacher leadership (Heller & Sindelar, 2003; Hope, 1999). They found that the quality of teaching improves for both the mentor and the mentee teacher because as mentors assist their mentees they also improve their own competency. The novice teacher learns from the wisdom of the veteran teacher and the mentor is introduced to new ideas about curriculum and teaching by the mentee. Some researchers (Ingersoll, 2001; McCorkel-Clinard & Ariav, 1998) suggest putting teachers into a leadership role such as mentoring, will benefit the veteran teachers. Ingersoll further believes tapping into the commitment of developing supportive schools will keep teachers in the profession (Ingersoll, 2001; Johnson & Kardos, 2002). Mentoring would foster that supportive school culture.

Mentoring

Mentoring programs are present in most school districts where administrators hope to guide novice teachers through their first few years of teaching. According to Ganser, (2002) Principals should be viewed as a target for mentor training so that they can provide informed leadership in promoting mentoring in their schools. Ganser (2002) also believes for many principals, formalized mentoring is a form of staff development that was largely ignored in their preparation programs for administration. For this reason time, must be devoted to the understanding of mentoring as a means of development. Odell and Huling, (2000) define mentoring as “the professional practice that occurs in the context of teaching whenever an experienced teacher supports, challenges, and guides novice teachers in their teaching practice” (Odell & Huling, 2000, pg. xv). They define mentors as experienced teachers who have as part of their professional assignment the mentoring of preservice or beginning teachers as they are learning to teach. “Mentors study the pedagogy of mentoring” (Odell & Huling, 2000, pg. xv). Ganser (2002) believes the need for high quality training is understood when it is accepted that

being a good teacher is a necessary but insufficient condition for being a good mentor. Being a good teacher does not necessarily mean a teacher will be a good mentor.

Ganser, (1999) discusses two studies of K-12 teachers who served as mentors. In these studies Ganser found that experienced mentors often used metaphors to describe mentoring. He believes using metaphors provides a useful tool in training mentors. These metaphors include,

1. raising a teenager;
2. teaching, such as teaching a child to ride a bike;
- 3.problem prevention/Emergency Service, such as a tug
boat guiding a ship safely to port;
4. giving directions, such as a directional compass
for someone lost in the woods; and
5. growth and creativity, as in watching a flower
bloom. (Ganser pg. 43)

Ganser (1999) further states: “The figurative language used by teachers to describe their experience as mentors is useful in elucidating the complexities of mentoring and the mentoring relationship. For example, there is an important difference in the personal investment in mentoring as “raising a child” versus mentoring as “jump-starting a dead car battery” (pg. 43).

Future Growth of Mentoring

Ganser, (1999) suggests that mentor programs are likely to expand over the next few decades. First there is a large influx of beginning teachers. This is partially due, to an increasing number of children entering American schools and partially because a growing proportion of teachers will be retiring. Further, Ganser (1999) believes there is a growing effort to reduce

student/teacher ratios which will also contribute to the number of new teachers and consequently to the expansion of mentoring programs.

Ganser, (1999) wrote that mentoring requires the veteran teacher to be familiar with the needs of the beginning teacher and teacher development. Since mentoring requires instructional supervision skills, such as observation of teaching and conferencing skills, Ganser believes that mentor training fosters these skills in the veteran teacher (Ganser, 1999). Therefore, a mentor training component is vital to the success of the mentor program. The mentor must have an idea of what their role as mentor looks like.

Role of Mentors

While the role of a mentor is extensive, the most important role is to promote the novice teachers' professional competence and personal growth. To accomplish this, mentors serve as instructional advisors to new teachers. Often times, mentor teachers are often assigned a mentee and are instructed to 'take them under their wing', yet they are given no guidelines on their role. Hall, Draper, Smith and Bullough (2008) believe these misunderstandings produce role confusion often resulting in mentor teachers who limit themselves to functioning as cooperating teachers rather than as actual mentors. To do this well, Blank and Sindelar, (1992) believe "mentors need to be familiar with the research on teaching as a means for validating current practice, seeing beyond limited perspectives, and suggesting innovative and alternative procedures" (Blank & Sindelar, 1992, pg. 21). Such knowledge enables mentors to provide critical, helpful feedback to new teachers. Successful mentors generally are thoughtful practitioners who possess analytical and problem-solving abilities (Blank and Sindelar, 1992). Therefore, it is important that administrators select mentors accordingly.

Mentor Selection

Because a mentor must also play the role of caring and concerned friend, the mentor must be a good listener who allows their mentee to “vent” when necessary without making any comments. Therefore, effective selection of a mentor is crucial to the success of the program. Blank and Sindelar’s study (1992) provided four criteria for mentor selection. First and foremost, mentors should be excellent teachers. They should have excellent classroom management skills and have an effective discipline management plan. Secondly, mentors should be team players and should have a positive attitude toward education, the students, faculty, parents and community. Additionally, it is important that the mentor and mentee be matched professionally which usually means that mentors should have a subject area/grade level “match” with new teachers. This may not always be possible but proves to be effective if followed. Finally, the mentorship should be “by invitation only.” Mentors should not be forced into mentoring. The invitation communicates the administrator’s belief in the teacher and their skills as well as recognizes their needs as an individual.

While Blank and Sindelar (1992) provide criteria for selecting mentors they note that “the way mentoring occurs for mentors and protégés is idiosyncratic. They observed that mentoring for one pair is different from the way mentoring occurs for other pairs” (pg. 23). One reason for this difference is that mentoring takes time, and time is always a limited resource. However, time committed to mentoring can prove beneficial for both the mentor and mentee. For example, mentor teachers often report feelings of revitalization due to the recognition and enhanced status of serving as a mentor. This extends their ability to serve as a mentor by further enhancing their own teaching ability and by sharing that ability with a mentor.

Rowley, (1999) believes that as formal mentoring programs gain popularity, the need for identifying and preparing good mentors grows. For the last decade, Rowley has helped school districts design and implement mentor-based entry-year programs. Through his observation of numerous programs, he identified six basic, essential qualities of a good mentor and the implications the qualities have for entry-year program design and mentor training (Rowley, 1999). He also found that the good mentor is “committed to the role of mentoring” (Rowley, 1999, pg. 20). Mentoring is no easy task and requires a significant amount of time and energy on the part of the mentor. If the mentor is not committed to the mentorship, the program will serve little purpose to the mentee. Also, the good mentor is “accepting of the beginning teacher” (Rowley, 1999, pg. 20) and recognizes the mentee is a work in progress. By accepting a new teacher’s faults and helping that mentee recognize those faults the mentor and mentee can jointly create a plan of action to address the deficiencies. A good mentor empathizes with the new teacher’s plight; they too were once a new teacher.

Additionally, the good mentor is “skillful at providing instructional support” (pg. 21). Beginning teachers enter the school at different levels both cognitively and emotionally. Mentors must provide quality instructional support to these new teachers. Some schools promote peer observations, which foster instructional growth. Rowley compares the situation to an athlete who is perfecting their skills under the mentorship of other athletes. The novice cannot learn how to improve their tennis serve or golf swing without seeing the experienced players perform those tasks. The same is true for excellent teaching. Mentors demonstrate excellent teaching to their mentees.

Further, the good mentor is “effective in different interpersonal contexts” (Rowley, 1999, pg. 22). Beginning teachers are all different as are all mentors. Rowley (1999) suggests, “good

mentor teachers recognize that each mentoring relationship occurs in a unique, interpersonal context” (pg. 21). In the same way that good teachers modify behaviors and forms of communication to meet the needs of the students, good mentors modify teaching behaviors and forms of communications with the novice teachers. Next, the good mentor models continuous learning. Rowley, (1999) believes good mentor teachers rarely appreciate mentees who are “transparent about their own search for better answers and more effective solutions to their own problems” (pg. 22). The good mentor often enrolls in graduate level or continuing education courses and implements the newly acquired strategies in their daily teaching practices. Finally, the good mentor communicates hope and optimism (Rowley, 1999). Effective mentors not only share their own frustrations but also discuss how they overcame a particular obstacle. Such mentors steer their mentees away from activities and situations that feed negativity. Rowley, (1999) believes if teachers and administrators highly value mentoring and take it seriously; mentoring “will attract caring and committed mentor teachers who recognize the complex and challenging nature of classroom teaching” (pg. 22) and are capable of translating that knowledge into effective mentoring.

Mentor Preparation

Establishing a mentor program alone does not ensure success for the novice teacher. Mentor teachers need to be adequately prepared to take on the role. Many states require specific training for mentor teachers, “which suggests that these roles call for knowledge and skills that teachers may not acquire from work experience alone” (Ganser, 1996, pg. 380). However, according to Ganser (2002), “the fact that many of them have not received formal training for these roles suggests that their comfort level in being a mentor may reflect low expectations” (pg. 384). Ganser also suggests that the absence of expectations and training for the mentor will

greatly minimize the programs effectiveness. He suggests mentors receive the appropriate knowledge, skills and resources needed to effectively assume the role of mentor.

According to Ganser the required knowledge mentors need should mirror the goals of the mentor program. He (1996), recommended mentor teachers obtain knowledge in the following areas:

1. Beginning Teachers. Mentors should be familiar with the stages of teacher development
2. Teaching as a Job. Mentors should understand the basic characteristics of teaching as a complicated job conducted in a complex setting.
3. Teaching as a Career. Effective mentors understand that teachers experience various stages throughout their year.
4. Adult Development. The principles and practices of adult development and adult learning are another part of the knowledge base that fosters effective mentoring.
5. Teacher Preparation. Familiarity with teacher preparation in general and with specific training programs can give mentors important insight into why beginning teachers are inclined to think and act the way they do.
6. Curriculum and Teaching Innovations. Mentors should also be familiar with and open to innovative approaches to curriculum design and teaching which beginning teachers are eager to implement in their work.

Ganser also believes that while mentors obtain knowledge in the areas discussed above, administrators should also provide opportunities for mentors to develop certain skills necessary

to appropriately and effectively mentor novice teachers. These skills Ganser (1996) suggests include the following:

1. Conferencing. Effective mentoring requires expertise in conferencing skills.
2. Observe Teaching. Provide mentors with experiences in the systematic observation of teaching.
3. Problem Solving. Assist mentors in developing problem-solving strategies.

Knowledge and skills are important pieces in mentor teacher preparation but if mentors lack the resources to obtain the knowledge and skills, the likelihood of success is minimized.

Ganser (1996) also offers a list of useful resources. These resources include:

1. Beginning Teachers. Narrative accounts of the experiences of beginning teachers help veteran teachers recall their own experiences as new teachers.
2. Mentoring. There are many user-friendly publications that provide guidance in establishing mentoring programs and that highlight important issues in mentoring.
3. Research on Beginning Teachers and Mentoring. Explore the research on beginning teachers and mentoring through comprehensive reviews.

Each of the categories listed above are accessible and are helpful. Mentor teachers need access to and understanding of these categories so that they will know what to expect from their mentee and in which areas they need help.

Orland-Barak (2005) compares the transformation of a teacher into a mentor to learning a new language. Mentors must translate the language of teaching into the language of mentoring. Due to the complexity of this transition the teachers are often “lost in the translation” (Orland-

Barak, 2005, pg. 364). Veteran teachers are often expected to automatically transform into a mentor teacher simply because they are experienced. According to Orland Barak “without appropriate exposure and preparation to manage these aspects, mentors will probably find themselves lost in translating their first language (teaching) to the second language of practice (mentoring), consequently experiencing the feelings of incompetence and strangeness” (Orland-Barak, 2005, pg. 364) just as one is taught a new language, teachers must be taught how to mentor. Well established and implemented mentor programs can help address this task. The suggestions discussed above are an important step in the implementation of an effective mentor program.

Self-Efficacy Theories

Albert Bandura wrote that the task of creating environments conducive to learning rests heavily on the talents and self-efficacy of teachers. Evidence indicates that classroom atmospheres are partly determined by teachers’ belief in their instructional efficacy (Bandura, 1993). Self-efficacy is often defined as the belief that one is capable of performing in a certain manner to attain certain goals (Bandura, 1993). It is a belief that one has the capabilities to execute the courses of actions required to manage prospective situations. The discussion below describes the theories surrounding self-efficacy.

This review of literature has included theories of mentoring, establishing mentor programs, and mentoring in general. They are all important aspects of mentoring. One way to measure growth in mentors is to study their self-efficacy.

Self Efficacy

According to Albert Bandura’s research “efficacy beliefs influence how people feel, think, motivate themselves, and behave. Self-efficacy beliefs produce these diverse effects

through four major processes. These include cognitive, motivational, affective, and selection processes” (Bandura, 1997, pg. 118). The first process is the cognitive process. Bandura, (1997) believes most courses of action are initially shaped in thought. A person’s beliefs shape the way they construct scenarios in their head. Many teachers construct these scenarios according to the social norms of their environment. Bandura believes people must, therefore, assess their capabilities in relation to the attainment of others. Social feedback contributes to this construction. According to Bandura, (1993) people strive to meet certain goals and the way in which they progress is socially evaluated and, therefore, affects their self-efficacy appraisal. Most teachers perceive they have some control in this process whether they make the right choice or not.

The second process mentioned in Bandura’s study, (1993) is the motivational process. He stated that most courses of action like most human motivation is cognitively generated. People motivate themselves and guide their actions by anticipating the expected outcome. They set goals for themselves based on what they want to happen. Bandura, (1993) believes there are three forms of cognitive motivators. These include casual attributions, outcome expectancies, and cognized goals. Casual attributes affect motivation performance. For example, someone with high self efficacy would contribute failure to insufficient effort, while someone with low self-efficacy would attribute failure to low ability. In outcome expectancies, motivation is controlled by the expectation that certain behaviors will result in certain outcomes. It is their belief in their own abilities that motivate the process. Cognized goals are motivators in behavior that are guided by cognized goals operating in the present rather than pulled by an unrealized future state (Bandura, 1993; Bandura 2001). Cognized goals involve a person making goals that revolve around some form of self-satisfaction. People will set goals that will achieve self-

satisfaction and therefore create incentives which will motivate them to persist until they have achieved their goal. They gain self-satisfaction by achieving their goal.

The third process produced by self-efficacy beliefs is the affective process. Bandura, (1993) contends this is the emotional mediator of self-efficacy belief. A teacher's perceived efficacy to control a stressful situation plays a central role in the level of anxiety. Bandura, (1993) believes stress is affected not only by perceived coping efficacy but also by perceived efficacy to control disturbing thoughts. If they believe they can exercise some control they are able to manage their anxiety. Those who believe they have control have higher self-efficacy, while those who feel variables are out of their control have lower self-efficacy. Due to the level of anxiety that accompanies those with low self-efficacy, an increase in avoidance behavior is often demonstrated.

The final process produced by efficacy beliefs is the selection process. Bandura, (1993) contends a teachers' perceived efficacy could shape and alter the course or path they take in life by influencing choice of activities and environments. Career choices are a perfect example of the affects of a person's self-efficacy on the paths of life through choice-related processes. Certainly a teacher's self-efficacy affects the classroom environment. Those with stronger self-efficacy have a wider the range of career options. Those with low self-efficacy have limited career options. The higher self-efficacy also contributes to how they prepare themselves for various careers as well as their staying power in that career. Teachers who have a higher self-efficacy will devote more time to preparing their rooms for student success. Other researchers have expanded on Bandura's theory of self-efficacy by studying it in an educational setting.

Efficacy and Teaching Practices

Caprara, Barbaranelli, Borgogni, and Steca, (2003) also researched the affects of efficacy on teaching practices. They believed efficacy beliefs could increase retention and job satisfaction. Their hypothesis was that a teacher's self-efficacy beliefs directly influenced their perception of the extent to which principals, colleagues, and staff dealt with their respective tasks and the extent to which students and families contributed to the well functioning of the school, their beliefs about the collective efficacy of the school, as a whole, and their job satisfaction (Caprara, Barbaranelli, Borgogni, & Steca, 2003; Bandura, Caprara, Barbaranelli, Pastorelli & Regalia, 2001). The results of the study attested to the validity that self-efficacy beliefs as the main determinants of teachers' job satisfaction. Teachers with higher self-efficacy had higher retention and job satisfaction. Others believe "participation in a mentoring program is valuable not only for the novice but also for the veteran mentor, in that it positively affects teacher efficacy for both (Yost, 2002, pg. 195; Brennan, Thames, and Roberts, 1999). Some researchers took this a step further by connecting self-efficacy with teacher empowerment.

Self Efficacy and Self Esteem

Researchers often attach efficacy with self-esteem and empowerment. According to Enderlin-Lampe, (2002) in order to "enhance teacher efficacy, teachers must believe that their behaviors can effect the education of their students" (Enderlin-Lampe, 2002, pg. 142). Their paper examined the degree of congruence between teacher's perceived and aspired level of shared decision making and teacher self-efficacy (Enderlin-Lampe, 2002; Pajares, 1996). Enderlin-Lampe, (2002) believed teachers need to feel competent to do the job and be assured that the system is capable of supporting their role.

Self Efficacy and Empowerment

Short, (1994) believes self-efficacy is a dimension of teacher empowerment. Self-efficacy was defined by Short as the teacher's perception that they have the skills and ability to help students learn, are competent in building effective programs for students, and can effect changes in student learning. Short believed self-efficacy was, as a teacher acquired more knowledge, the belief that they were competent and that they had mastered the necessary skills to gain the desired outcomes.

Regardless of definition, self-efficacy is viewed as a vital component to effective teaching. In order to ensure the success of a mentor program only mentors with high self-efficacy should be chosen.

Summary

Mentoring programs are vital to a novice teacher's success; however they also provide benefits for the veteran teachers. The benefits of mentoring do not stop with the mentees. Mentoring programs are present in most school districts. The purpose of the mentor program is to guide novice teachers through their first few years of teaching. Mentoring programs benefit the mentee but there are also several benefits for the mentor and the campus. Mentoring programs have a direct impact on the teaching practices of mentors as well as nurturing their leadership skills. Moir and Bloom, (2003) believe "Classroom teachers believe that they are much more effective because of what they learned as mentors, and those outside of the classroom believe that their mentoring experiences are a primary source of their effectiveness as leaders" (Moir & Bloom, 2003, pg. 59).

Veteran teacher attrition rates are increasing (Darling-Hammond, 2003). Teachers are burning out. Many administrators, however, have recognized the benefits of mentoring which

help address this problem. Darling-Hammond (1996) discusses the following benefits:

“Mentoring offers veteran teachers professional replenishment, contributes to the retention of the regions best teachers, and produces teacher leaders with skills and passion to make lifelong teacher development central to school culture” (Moir & Bloom, 2003, pg. 58; Darling-Hammond, 1996; Darling-Hammond, 2009)

While there is research on the benefits of the mentoring for the mentors and mentees, little research focuses on the impact of mentoring on a mentor’s self-efficacy. There is a near void in the research regarding the impact of mentoring and mentor training, on a mentor’s self efficacy.

CHAPTER III

METHODOLOGY

Introduction

One of the most important changes in the behavioral science realm was the revision of beliefs surrounding adult development, and whether or not it was possible. Can adults continue to develop and move to higher cognitive levels? Several theorists believe adults can continue to develop and move to higher conceptual levels. One process that tests this assumption is that of mentoring. Developmental mentoring is an example of adult growth and development. Mentor programs were initially designed to help the mentee, however recently researchers have found it may also benefit the mentor. While there is some research on the benefits such as improved practices and reduced attrition of the mentors and mentee, there is little research on the impact of certain mentor training models on teacher self efficacy, such as those designed following Thies-Sprinthall and Sprinthall's model which includes the five components of role taking, reflection, balance, continuity and support and challenge..

There are few well-defined mentor training programs, and of the few that do exist, many are just given in the course of one day. The state of Texas, offers little in the way of formal regulations for the design or implementation of a mentor program. As a result, there are very few guidelines available to follow in designing a mentor program and therefore numerous ways to implement the programs. Some mentor programs do not even require mentor training. However, many districts do require some form of training for their mentors. Once the mentors have completed these training sessions, there is no instrument in place to assess the effectiveness of the training. For this reason, few researchers have been able to study how mentor's perceptions are affected by these programs.

Purpose of the Study

The purpose of this research is to investigate differences found in the perceptions of trained mentors, who are trained using a cognitive developmental model of mentor training, with mentor teachers who have received little or no training. The following questions will direct the focus of the study:

1. What differences exist in the perceptions of teacher mentors who received cognitive developmental mentor training and those who received little or no training based on indicators for self-efficacy?
2. What differences exist in the perceptions of teacher mentors who received cognitive developmental mentor training and those who received little or not training based on responses to open-ended questions?

Participants

There were eighteen participants in the study. Nine were university mentors and nine were district trained mentors. Two groups of mentors participated in the study. One group consisted of university mentors involved in Texas A&M University's Teacher Internship and Induction Program. These mentors completed Cognitive Developmental Mentor Training through Texas A&M University's Mentoring Research Collaborative for Learning and Development. This training included both introductory and on-going professional workshops addressing mentoring practices. The other group consisted of campus mentors. The campus mentors were required to attend a one-time district mentor training session sponsored by their district.

University Mentors

The university mentors were comprised of mentors involved in Texas A&M University's Teacher Internship and Induction Program. All of the university mentors were experienced teachers with more than 10 years teaching experience. The university mentors were comprised of teachers from various suburban school districts. The university Induction program works with six suburban school districts and pulls their mentors from the districts. The mentors are hired through a collaborative interview with a team from the university and the district. The university mentors were trained using a cognitive developmental model of mentoring through Texas A&M University' Mentoring Research Collaborative Institute. Their training model includes Sprinthall and Thies-Sprinthalls (1987) five components of role taking, reflection, balance, continuity, and support and challenge. In order to participate in the Induction program the mentors must have a Master's degree and at least 5 years experience in the district, although the mentors in this study all had more than 10 years teaching experience. They must be a highly respected teacher with strong mentoring skills. The program also requires the mentors to act as a liaison between the university, the school district and the interns. The university also requires the mentor to conduct seminars with interns in the areas of classroom management, organization, teaching styles and other issues that may arise during their mentorship. The mentors are to assist their mentees with crises or emergencies. Further, the university requires the mentors to guide the intern's growth in reflective thinking and self evaluation. As a part of their training, the mentors are trained in reflective practices so that they may effectively train mentees in reflection. The university mentors are also required to work with the campus administration to facilitate professional growth, strengthen weaknesses and encourage the success of the mentee. Each of the university mentors were trained through the workshops offered as a part of the mentoring research

collaborative through the university. Each mentor completed both the introduction and advanced level mentoring practices workshops. The university mentors were full time mentors and had no classroom teaching responsibilities.

Campus Mentor

The campus mentors were from a suburban school district made up of about 34,000 students. The suburban school district works with the university in conjunction with the Teacher Internship and Induction Program. The campus mentors had received minimal formal training from their district; however, their district required that they all attend the one day district sponsored training. According to the Director of Professional Development, the training consisted of a description of their role as a mentor and their responsibilities during their mentorship. They were given a binder of all of the required paperwork they needed to complete during their mentorship, such as logs of when they met with their mentee and classroom observation monitoring sheets. The mentors were trained on how to complete each form. The training also included a discussion of typical first year teacher struggles and ways to help the mentee. The training did not include any information about adult learning or reflective practices. Some were chosen by their administrators and others volunteered. The district required that the mentors had at least 5 years teaching experience, however, unlike the university mentors, they did not require the campus mentors to interview for the position. Approximately two thirds of the campus mentors had mentored in the past, others were mentoring for the first time. The campus based mentors were all experienced teachers with at least 5 years experience. It is important to note that the campus based mentors were all still teaching, while the university mentors were full

time mentors and do not have any traditional teaching responsibilities. Their primary responsibility was still their classroom, and therefore they were a teacher first and a mentor second.

Data Collection

The study followed a mixed method model. The researcher used both qualitative and quantitative methods to collect data. The researcher felt using both methods would offer the best opportunity to clarify the differences between the two groups. Qualitative research looks at how participants make meaning of a phenomenon. Merriam suggests “in conducting a basic qualitative study, you seek to discover and understand a phenomenon, a process, the perspectives and worldviews of the people involved, or a combination of these...data are inductively analyzed to identify the recurring patterns or common themes that cut across the data” (Merriam, 2002, pg. 6). Merriam also suggests using more than one method of data collection as multiple methods enhance the validity of the findings.

The researcher’s methods of data collection included asking open ended interview questions to the university mentors and requiring written responses to the same questions from the campus mentors, administering a “Mentor Efficacy survey”, and requesting a mentoring self analysis narrative from each mentor group. The questions were created after studying mentoring material and with the help of an expert in the field of mentoring. The mentor efficacy survey was modified from Woolfolk & Hoy (1990) and Gibson Dembo’s (1984) teacher efficacy instrument.

The researcher established trustworthiness through peer reviews, which involved discussions with colleagues regarding the collection and interpretation of data as well as how to best analyze the data collected. The researcher also established trustworthiness by using a

validated self-efficacy instrument at the basis for the development of the “Mentor Efficacy” survey. Descriptive statistics were used to describe the results of the survey.

University Mentors Data Collection Procedure

In order to secure the participation of the university mentors in the study, the researcher first gained permission from the Director of Teacher Internship and Induction Programs to work with the university mentors involved in the program. Permission to meet with the mentors was also obtained from the Director of the Mentoring Research Collaborative, who also worked in connection with the teacher internship and induction program and provided training for the university mentors. The researcher also gained permission to use the mentor teacher’s mentoring self analysis, which was developed by Dr. Elizabeth Foster. This self analysis was regularly administered in the university training program for mentors.

The researcher met with the university mentors during one of their mentoring sessions held at the university in October of 2007. All nine members of the induction program agreed to participate in the researcher’s study. Each member completed the permission forms. At the October session, the researcher was also given access to the mentoring self-analysis and allowed to question the mentors as well as administer the “Mentor Efficacy” survey. Each mentor was interviewed by the researcher separately in a classroom adjacent to the training room. The interviews took approximately ten minutes. The researcher recorded each of their responses to each question by taking notes as they answered the questions. The researcher asked the same seven questions asked of the campus mentors; the researcher did not ask any additional questions or probe for more information. While the mentors took turns being interviewed, the mentors who remained in the training room responded to the statements on the “Mentor Efficacy” survey.

Campus Mentors Data Collection Procedure

The researcher gained permission from the Director of Professional Development Teacher Specialists from a suburban school district to seek participants from their mentoring program. The Director from the district requested hard copies of each of the data materials, so that she could distribute the materials with the other documents they were required to complete at the end of the first semester. Although fifteen campus mentors expressed an interest in the study and completed the permission forms, only nine mentors were needed to align with the nine university mentors available for the study. The researcher used purposeful sampling and chose nine campus mentors from the school district based on their completion of the three data pieces. Not every mentor completed all of the data pieces; therefore the researcher chose the nine who completed each of the three data pieces in a thorough manner.

The campus mentors were given seven open-ended questions that were completed and returned in November of 2007 via mail. Each interested mentor was given a copy of the open ended questions and asked by the school district Professional Development Teacher Specialist to submit their answers in writing and return them to the researcher via mail. Each participant answered the same seven questions asked during the university mentor's interview. In collaboration with the Professional Development Teacher Center, the researcher was able to disseminate the self-efficacy survey and mentoring self analysis. The Director of Professional Development Teacher Specialist distributed the three data pieces in November 2007. The campus mentors completed the "Mentor Efficacy" survey and self-analysis on their own time and mailed their responses to the researcher in December 2007.

Analysis of Data

The researcher gained information regarding each mentor's understanding of mentoring and level of training through the open ended questions. Each mentor described their training and knowledge of mentoring through their responses to each of the seven questions. The mentor efficacy survey allowed the researcher to see the perceptions of each mentor regarding mentor efficacy by their responses to each of the twelve statements in the survey. The mentoring self analysis narrative allowed the researcher to catch a glimpse of the mentor's understanding of mentoring, definition of mentoring and understanding of their role as mentors.

Open Ended Questions

All respondents to the survey instrument were also asked to answer seven questions. The university mentors were asked the seven questions during an interview and the campus mentors were asked to give a written response to the seven questions. The questions were created after reviewing mentoring material to look for salient questions and with the assistance of an expert in the field of mentoring from the university, to ensure the questions were appropriate and would evoke descriptive responses. The questions are as follows:

1. How did you come to mentor, did you volunteer or were you assigned? Describe your level of interest in mentoring.
2. What do you recall knowing or understanding about mentoring prior to your current mentoring role?
3. Describe the preparation/training you have received as a mentor. What on-going support do you currently receive?
4. What new knowledge or understanding do you have as a result of your current mentoring role?
5. How would you describe the changes in your understanding about mentoring?

6. How does this current knowledge, understanding or changes in your knowledge affect your approach to mentoring today? In the future?
7. Using a metaphor, describe your mentorship. (ex: flower blooming)

The university mentors were asked the seven questions during an interview and the campus mentors were asked to give a written response to the seven questions. The campus based mentors and university based mentors answering these questions were all experienced teachers. It is important to note that the campus based mentors were all still teaching, while the university mentors were full time mentors and did not have any traditional teaching responsibilities. The interviews were conducted and the written open-ended questions were administered near the end of the first semester between October and December of 2007.

For analysis of the open-ended questions, the researcher used the basic interpretive approach which requires constant comparisons of each type of data. A characteristic of the basic interpretive approach is to seek an understanding of how meaning is constructed, or how people make sense of their lives and their worlds (Merriam, 2002). In this study, the researcher was interested in how mentor teachers constructed their meaning of mentoring. After the interviews and reading the written open-ended questions, the researcher looked for emerging themes such as self-efficacy, reasons for mentoring, and what the mentors hoped to gain from the experience. Question number seven, which asks the mentor to describe mentoring using a metaphor, was created in correlation with Tom Ganser's (1999) research regarding mentor's perceptions of their mentor experience through the use of metaphors. Question number seven was included to force the participants to reflect on their mentoring using a more abstract approach. After completion of the open-ended questions, the researcher analyzed the answers and looked for emerging

themes using the basic interpretive approach. The researcher looked for emerging themes within each group and between each group. Although the procedure for asking the seven questions differed, the researcher used the same method of constant comparison, as a part of the basic interpretive approach to compare their responses to each question.

“Mentor Efficacy” Survey

A “mentor efficacy” survey created by modifying two separate teacher efficacy scales was used. The teacher efficacy scales used in the development of the survey were developed by Woolfolk & Hoy (1990) and Gibson and Dembo (1984). The items on the survey were reworded so that they applied specifically to mentor teachers. For example, on Woolfolk & Hoy’s teacher efficacy instrument, they included the statement, “If I really try hard, I can get through to even the most difficult or unmotivated student.” The researcher modified this statement by changing the word “student” to “mentee”, so that the statement referred to the relationship between the mentor and the mentee. The researcher went through each statement on the Woolfolk & Hoy instrument and the Gibson and Dembo instrument and chose the statements that could be modified and reworded to address mentoring. Statements that could not be reworded were omitted. An example of the omissions is the statement that “if students aren’t disciplined at home, they aren’t likely to accept any discipline” because the statement could not be reworded or modified to fit mentoring. The researcher took the twelve statements that could be modified to fit mentoring and used those to create the survey.

The “Mentor Efficacy” survey consisted of twelve items. The twelve items were rated using a Likert-type scale from one to six. Number one represented the strongest association of agreement to each statement and the number six represented the least association of agreement to each statement. The participants were asked to respond to each statement on the instrument

regarding mentoring. The purpose of the survey was to gather information regarding the attitude of educators concerning these statements. The sampling size of each group was nine participants. These groups were too small for conducting reliable statistical analysis; however, the researcher did compare the total mean scores from each group, compiled the frequencies of responses for each question and each group, and conducted a t-test on the total means scores of the two groups

Self-Analysis

After the completion of the seven questions and the self-efficacy survey, the university mentors and the campus mentors completed a mentor self-analysis entitled “What is Mentoring?” The self-analysis was a one page narrative in which the mentors described their feelings about mentoring and what it means to them. The university mentors completed the narrative in conjunction with their training in the mentoring workshops. The self-analysis was disseminated in November of 2007 to the campus mentors by the Director of Professional Development Teacher Specialist and returned to the researcher by U.S. mail. Once the narratives were completed and returned, the researcher compared their responses and looked for emerging themes. The researcher investigated the perceptions each mentor had regarding mentoring and their role as a mentor within the narratives. The researcher also compared the definitions of mentoring listed in each of the narratives. The researcher compared the definitions, within and between each group to see if there was a difference. Both groups completed the three pieces of data by the end of the first semester in December of 2007.

Limitations

Mentoring means different things to different people. Bias and past experiences shape the way a teacher views mentoring. Mentors who have been trained will have a different

definition than those who have not received training. These individual differences were not explored in this study.

Another limitation is that district mentors have different job assignments and thus have different responsibilities. University mentors are strictly mentors and have no other teaching responsibilities. Therefore their perceptions of their role as mentor may differ from district mentors.

Another limitation is that the researcher did not meet with the campus mentors face to face like the university mentors. For this reason the researcher did not conduct an interview, but instead asked the campus mentors to complete seven open ended questions which were asked during the university mentor interviews.

The final limitation was the assumption that the mentors were honest in completing their interviews, “Mentor Efficacy” surveys, and mentoring self-analysis.

Summary

The design of this study provided insight into the minds of the mentors and focused on their perceptions of mentoring. Chapter IV will present the data collected over the semester and highlight the themes which emerged in the open-ended questions, mentor efficacy survey and mentoring self-analysis.

CHAPTER IV

FINDINGS AND ANALYSIS

Introduction

This study compared perceptions of campus and university based mentors of public school teachers utilizing surveys, interviews, and written comments. The researcher was interested in whether the university based mentors, who participated in a cognitive developmental mentor training, would evidence different perceptions as a result of the training than the campus mentors who received little or no training. The researcher administered a survey using questions modified from an instrument used to measure the self-efficacy of teachers to both. Responses to the survey were expanded through personal interviews and written responses to the question “What is a mentor?” Participants were also asked to provide a metaphor for mentoring.

The researcher used two questions of interest to guide the study.

Questions of Interests

1. What differences exist in the perceptions of teacher mentors who received cognitive developmental mentor training and those who received little or no training based on indicators for self-efficacy?

2. What differences exist in the perceptions of teacher mentors who received cognitive developmental mentor training and those who received little or no training based on responses to open-ended questions?

Question One Results

The differences that exist in the perceptions of teacher mentors who received cognitive development and those who did not were obtained through a “Mentor Efficacy” survey. The

survey used in this study was created by modifying two separate teacher efficacy scales developed by Woolfolk & Hoy (1990) and Gibson and Dembo (1984). The items on the survey were reworded so that they applied specifically to mentor teachers. On Woolfolk & Hoy's teacher efficacy instrument, they included the statement "If I really try hard, I can get through to even the most difficult or unmotivated student." The researcher modified this statement by changing the word "student" to "mentee", so that the statement referred to the relationship between the mentor and the mentee. Statements that could not be reworded to fit mentoring were omitted. The researcher took the twelve statements that could be modified to fit mentoring and used those to create the survey. The researcher wanted to investigate if the perceptions regarding mentor self-efficacy differed among the two groups.

The mentor self-efficacy survey consisted of twelve items. The twelve items were rated using a Likert-type scale from one to six. Number one represented the strongest association of agreement to each statement and the number six represented the least association of agreement to each statement. The participants were asked to respond to each statement on the instrument, regarding mentoring.

Two groups were surveyed using the survey. One group consisted of mentors trained by Texas A&M University through their Mentoring Research Collaborative. The other group consisted of school-district mentors who had not received cognitive developmental training. There were nine participants in each group. Due to the small sample size, descriptive statistics were used to present the data from the survey. Responses from the survey were expanded and enriched through personal interviews and written responses. The survey may be reviewed in Appendix A. Tables with results from the responses and a discussion for each statement follow.

Table 4.1
Mean Scores for Campus and University Mentors to Written Survey Questions

Statements	Combined Mean	Campus Mean	University Mean	Difference
1. I have enough training to deal with most mentors	1.67	1.67	1.67	0
2. When a mentee is having difficulty with an issue I am usually able to help them solve their problem	1.56	1.44	1.67	.23
3. Mentors are not a very powerful influence on mentee performance when all factors are considered	4.94	5.22	4.67	.55
4. If a mentee implements a teaching concept easily, this might be because I knew the necessary steps to effectively teach the mentee how to deliver that concept.	3.28	3.00	3.56	.56
5. Even a good mentee with good teaching abilities may not reach many students.	3.83	4.11	3.56	.55
6. If my mentee couldn't complete a task, I would be able to accurately assess whether the mentee was at the correct conceptual level.	2.28	2.11	2.44	.33
7. If I try really hard, I can get through to even the most difficult or unmotivated mentee.	2.78	2.56	3.00	.44
8. When it comes right down to it, a mentor really can't do much because most of a mentee's motivation and performance depends on his or her training.	4.83	5.00	4.67	.33
9. My mentor training program and/or experience has given me the necessary skills to be an effective mentor.	1.50	1.33	1.67	.34
10. If a mentee lacks classroom management skills, I feel assured that as a result of my training, I know some techniques to help him or her regain control.	1.83	1.67	2.00	.33
11. As a result of my training, I can help my mentee improve his or her teaching.	1.44	1.44	1.44	0
12. I can enhance collaboration between the mentees and the administration to make the induction process run effectively.	2.06	2.22	1.89	.33

The number of campus mentors is 9 and the number of university mentors is 9.

Table 4.2
Response Frequencies for Survey Statements

	Strongly Agree	Moderately Agree	Agree Slightly More Than Disagree	Disagree slightly more than agree	Moderately Disagree	Strongly Disagree
Survey Statement						
1. I have enough training to deal with most mentors	C = 4 U = 4	C = 4 U = 4	C = 1 U = 1	C = 0 U = 0	C = 0 U = 0	C = 0 U = 0
2. When a mentee is having difficulty with an issue I am usually able to help them solve their problem	C = 4 U = 4	C = 2 U = 4	C = 1 U = 1	C = 0 U = 0	C = 0 U = 0	C = 0 U = 0
3. Mentors are not a very powerful influence on mentee performance when all factors are considered	C = 0 U = 0	C = 1 U = 2	C = 0 U = 0	C = 0 U = 1	C = 3 U = 2	C = 5 U = 4
4. If a mentee implements a teaching concept easily, this might be because I knew the necessary steps to effectively teach the mentee how to deliver that concept.	C = 1 U = 0	C = 1 U = 1	C = 5 U = 4	C = 1 U = 2	C = 1 U = 2	C = 0 U = 0
5. Even a good mentee with good teaching abilities may not reach many students.	C = 0 U = 0	C = 0 U = 1	C = 3 U = 3	C = 3 U = 4	C = 2 U = 1	C = 1 U = 0
6. If my mentee couldn't complete a task, I would be able to accurately assess whether the mentee was at the correct conceptual level.	C = 1 U = 1	C = 6 U = 3	C = 2 U = 5	C = 0 U = 0	C = 0 U = 0	C = 0 U = 0
7. If I try really hard, I can get through to even the most difficult or unmotivated mentee.	C = 1 U = 2	C = 4 U = 1	C = 3 U = 3	C = 0 U = 2	C = 1 U = 0	C = 0 U = 1
8. When it comes right down to it, a mentor really can't do much because most of a mentee's motivation and performance depends on his or her training.	C = 0 U = 0	C = 0 U = 1	C = 0 U = 1	C = 1 U = 1	C = 7 U = 3	C = 1 U = 3
9. My mentor training program and/or experience has given me the necessary skills to be an effective mentor.	C = 6 U = 5	C = 3 U = 2	C = 0 U = 2	C = 0 U = 0	C = 0 U = 0	C = 0 U = 0
10. If a mentee lacks classroom management skills, I feel assured that as a result of my training, I know some techniques to help him or her regain control.	C = 4 U = 3	C = 4 U = 4	C = 1 U = 1	C = 0 U = 1	C = 0 U = 0	C = 0 U = 0

Table 4.2 Continued

	Strongly Agree	Moderately Agree	Agree Slightly More Than Disagree	Disagree slightly more than agree	Moderately Disagree	Strongly Disagree
11. As a result of my training, I can help my mentee improve his or her teaching.	C = 6 U = 6	C = 2 U = 2	C = 1 U = 1	C = 0 U = 0	C = 0 U = 0	C = 0 U = 0
12. I can enhance collaboration between the mentees and the administration to make the induction process run effectively.	C = 1 U = 2	C = 5 U = 6	C = 3 U = 1	C = 0 U = 0	C = 0 U = 0	C = 0 U = 0

The number of campus mentors is 9 and the number of university mentors is 9. C=Campus Mentor, U=University Mentor

Results from the individual questions in the survey are given in the following paragraphs.

Statement One

Statement one was “I have enough training to deal with most teachers.” The mean for this statement was the same both between and within each group as shown in Table 4.1. The mean for statement one was 1.67 and the median was 2.00. Eight of the participants chose “Strongly Agree” and eight chose “Moderately Agree”. The remaining two participants both chose “Agree slightly more than disagree” as their answer. According to the survey results, the majority of university and campus mentors both felt that they had received enough training to deal with most new teachers as shown in Table 4.2.

Statement Two

Statement two was “When a mentee is having difficulty with an issue I am usually able to help them solve their problems.” The mean for statement 2 differed slightly between the two groups. The combined mean score was 1.56 and the median 1.00. The mean for the university group was 1.67 and the median was 2.00. The mean for the campus group was 1.44 with 1.00 as the median as seen in Table 4.1. Ten of the 18 participants chose “Strongly Agree” as their

response to statement 2. Four of the ten were university participants and six were campus participants. Six participants chose “Moderately Agree”; of the six four were university mentors and two were campus mentors. The remaining two participants chose “Agree slightly more than disagree”, one responder was from the university group and the other was from the campus group as shown in Table 4.2. While there were minimal differences between the responses of the university and campus mentors, the results show more participants chose “Strongly Agree” in the campus group than in the university group. According to the data, campus mentors felt slightly more confident about their ability to help mentees problem solve.

Statement Three

Statement three stated “Mentors are not a very powerful influence on mentee performance when all factors are considered.” The mean for the groups combined was 4.94 and the median was 5.50. The means for statement 3 differed between the two groups. The mean for the university group was 4.67 and the median was 5.00. The mean for the campus group was 5.22 and the median was 6.00 as shown in Table 4.1. Half (9) of the participants selected “Strongly Disagree” for statement 3. Four of the nine were university mentors and five were campus mentors. Five respondents chose “Moderately Disagree” and of the five, two were university mentors and three were campus mentors. Three chose “Moderately Agree”, two were university mentors and one was a campus mentor. Only one participant, a university mentor, chose “Disagree slightly more than agree” as shown in Table 4.2. The majority of the participants disagreed in some fashion with statement three. Although it is important to note, that a small percentage chose “Moderately Agree”, this does not correlate with the majority of the participants’ answers. The data indicates that the majority of the participants felt that mentors are a powerful influence on teachers when all factors are considered.

Statement Four

Statement four stated “If a mentee implements a teaching concept easily, this might be because I knew the necessary steps to effectively teach the mentee how to deliver the concept.” The combined mean for statement 4 was 3.28 and the median was 3.00. The university mean was 3.56; however, the campus mean was slightly less at 3.00 and the median for both the university and campus mentors was 3.00 as shown in Table 4.1. Nine respondents chose “Agree slightly more than disagree”; four of the respondents were university mentors and five were campus mentors. Three participants chose “Disagree slightly more than agree”, two of the participants were university mentors and one was a campus mentor. The breakdown was the same for “Moderately Agree”. Two participants chose “Moderately Agree” which was divided evenly between the university and campus mentors with one each. Only one respondent, a campus mentor, chose “Strongly Agree” as shown in Table 4.2. According to the data collected, half of the participants somewhat agreed with statement four, and therefore did not choose “Moderately or Strongly Agree”. This would indicate a neutral feeling toward the statement. Each mentor felt they had some influence on their mentee’s ability to deliver a concept, yet they did not feel comfortable enough to “Strongly Agree” with this statement.

Statement Five

Statement five stated “Even a good mentee with good teaching abilities may not reach many students.” According to the data collected the combined mean for statement 5 was 3.83 and the median was 4.00. The university mentor mean was slightly less with 3.56 however the median was the same. Additionally, the campus mentor mean was higher at 4.11, with a median of 4.00 as shown in Table 4.1. The response to statement five also leaned toward neutral; seven participants chose “Disagree slightly more than agree” and 6 participants chose “Agree slightly

more than disagree”. Four of the respondents who chose “Disagree slightly more than agree” were university mentors and the remaining three were campus mentors. The six participants who chose “Agree slightly more than disagree” were split evenly between the university mentors and the campus mentors with three each. One university mentor chose “Moderately Agree” and the remaining university mentor chose “Moderately Disagree”. Two campus mentors chose “Moderately Disagree” and the remaining campus mentor chose “Strongly Disagree” as shown in Table 4.2. Accordingly it would appear most university mentors leaned towards neutral and on the “Agree” end of the spectrum while campus mentors were either neutral or disagreed with the statement. The university mentors appeared to have more confidence in the mentee’s teaching ability.

Statement Six

Statement six stated “If my mentee couldn’t complete a task, I would be able to accurately assess whether the mentee was at the correct conceptual level.” The combined mean for statement six was 2.28 and the median was 2.00. The university mean was slightly higher at 2.44 and the mean at 3.00. The campus mean was lower at 2.11 with a median of 2.00 as shown in Table 4.1. Half the respondents chose “Moderately Agree”. Of the nine who responded with this choice, only three were university mentors and the remaining six were campus mentors. Seven participants responded with “Agree slightly more than disagree”. The majority of the seven were university mentors (5), and the remaining two were campus mentors. The last two respondents were split between the university mentors and the campus mentors and both chose “Strongly Agree” as shown in Table 4.2. While all of the participants chose one form of agreement, according to the data, the campus mentors had a stronger association to agreement than the university mentors. This stronger association by the campus mentors was unexpected.

The university mentors who have received training regarding the theories behind conceptual development felt less confident in assessing their mentee's conceptual level. It is important to note that campus mentors have not had any training regarding conceptual development and therefore do not know the proper definition of conceptual development. Even though they answered the question positively their definition may or may not be accurate.

Statement Seven

Statement seven stated "If I try really hard, I can get through to even the most difficult or unmotivated mentee." The combined mean for statement seven was 2.78 and the median was 3.00. The university mean was slightly higher at 3.00 while the campus mean was lower at 2.56. The university median was the same as the combined median however; the campus median was lower at 2.00 as shown in Table 4.1. Six participants chose "Agree slightly more than disagree", which was evenly divided between the university and campus mentors. Five participants chose "Moderately Agree". Only one of the four was a university participant; the remaining four who selected this response were campus mentors. Three participants responded with "Strongly Agree"; two were university mentors and one was a campus mentor. Two participants selected "Disagree slightly more than agree". Both participants who chose this response were university mentors. Only one participant, a campus mentor, chose "Moderately Disagree" as shown in Table 4.2. Only three participants did not choose a form of agreement for statement seven. According to the data, the majority of the mentors agreed with statement seven, however campus mentors had a stronger association to agree than university mentors.

Statement Eight

Statement eight stated "When it comes right down to it, a mentor really can't do much because most of the mentee's motivation and performance depends on his or her training." The

combined mean for item eight was 4.83 and the median was 5.00. The campus mean was slightly higher at 5.00 while the university mean was slightly lower at 4.67. Both the university and campus mentor median however, were both 5.00 as shown in Table 4.1. Ten participants selected “Moderately Disagree”. The majority of the ten were campus mentors (seven) and the remaining three were university mentors. Four mentors selected “Strongly Agree”. Three of the four were university mentors and only one was a campus mentor. Two participants selected “Disagree slightly more than agree”, one participant from each group made this selection. The remaining two participants chose “Agree slightly more than disagree” and “Moderately Agree”. Both participants were university mentors as shown in Table 4.2. All of the campus mentors disagreed with this statement yet two of the university mentors agreed with the statement.

Statement Nine

Statement nine stated “My mentor training program and/or experience has given me the necessary skills to be an effective mentor.” The combined mean for statement nine was 1.5 and the median 1.00. The mean for university mentors was slightly higher at 1.67 and the median was the same at 1.00. The campus mentor lower at 1.33 with a median of 1.00 as shown in Table 4.1. Eleven of the eighteen participants selected “Strongly Agree”. Six of those who chose this response were campus mentors and the remaining five were university mentors. Five mentors selected “Moderately Agree”. Three of the five were campus mentors and two were university mentors. The remaining two participants who responded with “Agree slightly more than disagree” were university mentors. According to the data, the university and campus mentor’s selections were very similar with only slight differences. It appeared that each set of mentors believed they had received the necessary training to be an effective mentor as shown in Table 4.2.

Statement Ten

Statement ten stated “If a mentee lacks classroom management skills; I feel that as a result of my training, I know some techniques to help him or her regain control.” The combined mean for statement 10 was 1.83 and the median was 2.00. The campus mentors mean was lower at 1.67 but the median stayed consistent with the combined group’s score of 2.00 as shown in Table 4.1. Eight mentors selected “Moderately Agree”; four participants from each group made this selection. Seven participants responded with “Strongly Agree”. Four of the seven were campus mentors and three were university mentors. Two mentors selected “Agree slightly more than disagree”. One mentor from both mentor groups chose this response. Only one mentor, a university mentor, chose “Disagree slightly more than agree” as shown in Table 4.2. According to the data most mentors believed they had enough training to assist their mentees with classroom management, however, more campus mentors felt a stronger association to agreement than university mentors.

Statement Eleven

Statement eleven stated “As a result of my training, I can help my mentee improve his or her teaching. The combined mean for statement 11 was 1.44 and the median was 1.00. The mean and median remained the same for both mentor groups as shown in Table 4.1. Twelve of the eighteen participants selected “Strongly Agree”. The twelve participants were equally divided between the two mentor groups, with six from each group selecting this response. Four mentors responded with “Moderately Agree”; two from each mentor group. One mentor from each group chose “Agree slightly more than disagree” as shown in Table 4.2. According to the data collected the mentors’ responses were evenly divided among the two groups. The responses indicate a very strong association with the agreement of statement 11. Both groups of

participants felt they had the ability, as a result of their training, to improve the teaching of their mentee. All of the participants agreed to mentor therefore they must have felt their mentoring would provide some benefit to the mentee.

Statement Twelve

Statement twelve stated “I can enhance collaboration between the mentees and the administration to make the induction process run effectively.” The combined mean for statement 12 was 2.06 and the median was 2.00. The university mean was lower at 1.89; however the median was the same. The campus mentor mean was slightly higher at 2.06 with the mean at 2.00 as shown in Table 4.1. Eleven participants responded with “Moderately Agree.” Six of the mentors who made this selection were university mentors and five were campus mentors. Four selected “Agree slightly more than disagree”. Three of the four were campus mentors and one was a university mentor. Three mentors chose “Strongly Agree”; two were university mentors and one was a campus mentor as shown in Table 4.2. As a result of the data all of the mentors agreed with statement twelve in some form, however, university mentors had a stronger agreement with statement twelve.

Statement Comparisons

Although there was a minimal difference in the mean scores for each statement, further study showed some interesting patterns and themes in the differences. There was no difference in means for statements one and eleven. Statement one, “I have enough training to deal with most mentors”, and statement eleven, “As a result of my training, I can help my mentee improve his or her teaching”, are both statements regarding training. The researcher found it interesting that the statements that had no difference in responses, dealt with training, which was an important factor in this study.

The researcher also noticed a pattern in responses for statements six, eight, nine and ten. The difference in mean scores for these statements was .33/.34. Each of these statements mentioned the mentor's skill or ability and how that skill or ability could help a mentee. The respondents from both the campus and university groups agreed, to some degree, with statements six, nine and ten, which spoke positively about a mentor's skills. Both groups disagreed, to some degree, with statement eight which spoke negatively about a mentor's skills.

Another theme emerged in statements three, four and five. The difference in mean scores was .55/.56. Each of the statements refers to the mentee's performance. The respondents disagreed with statement three and five which negatively reflect the mentee's performance in relation to the mentor. The respondents were some what neutral in regards to statement four which indicates the mentor can positively impact the mentee's performance.

There were two statements that were unique and did not appear to fit into the themes or patterns mentioned above. Statement two "when a mentee is having difficulty with an issue I am usually able to help them solve a problem" was a broad statement that left much up to the interpretation of the respondent.

A t-test was also run to see if there was any statistical differences in the total mean scores for the campus and university groups. The overall campus mean for the twelve statements was 2.6475 and the university mentor total mean score was slightly higher at 2.669166667 as shown in Table 4.3. The P one-tail was 0.483767669 and the t critical one tail was 1.717144335 as shown in Table 4.3. The researcher assumed the university mentor's score would be higher and therefore chose to use the one-tailed p-value. The one-tailed p-value was smaller than the critical one-tail and therefore shows no statistical difference between the two groups.

Table 4.3 Total Means Score

	<i>Campus Mentor</i>	<i>University Mentor</i>
Mean	2.6475	2.669166667
Variance	1.950675	1.373626515
Observations	12	12
Pooled Variance	1.662150758	
Hypothesized Mean Difference	0	
Df	22	
t Stat	-0.041165417	
P(T<=t) one-tail	0.483767669	
t Critical one-tail	1.717144335	
P(T<=t) two-tail	0.967535337	
t Critical two-tail	2.073873058	

t-Test: Two-Sample

The participants from each group responded similarly to each of the statements in the survey. Mentor self efficacy as defined in Chapter I, is the belief by mentors that they have the capacity to be a good mentor who will adequately help a mentee grow and as a result of their mentorship improve the mentees teaching practices. The mentors in each group responded to each of the statements in the survey based on their “beliefs that they have the capacity to be a good mentor.” According to the data their perceptions regarding mentor self efficacy are quite similar.

Question Two Results

All respondents to the survey instrument were also asked to answer seven questions. The university mentors were asked the seven questions during an interview and the campus mentors were asked to give a written response to the seven questions. There were nine campus based mentors and nine university based mentors. Each mentor answered the same seven questions. The campus based mentors and university based mentors were all experienced teachers. It is important to note that the campus based mentors were all still teaching, while the university mentors were full time mentors and did not have any traditional teaching responsibilities. The

interviews and written open ended questions were conducted and administered near the end of the first semester between October and December of 2007. The researcher met with the university mentors during one of their mentoring sessions held at the university in October of 2007. All nine members of the induction program agreed to participate in the researcher's study. Each member completed the permission forms.

At the October session the researcher was allowed to interview the mentors. Each mentor was interviewed by the researcher separately in an adjacent classroom from the training room. While the mentors took turns being interviewed the mentors who remained in the training room completed the self-efficacy survey.

The campus mentors were given seven open ended questions in November of 2007. Each interested mentor was given a copy of the seven questions and asked by the district Professional Development Teacher Specialist to submit their answers in writing and return them to the researcher via mail. Each participant answered the same seven questions given to the university mentors. The Director of Professional Development Teacher Specialist distributed the three data pieces in November 2007. The campus mentors completed the seven questions on their own time and mailed their responses to the researcher by December 2007.

Open-Ended Question #1 How Did You Come To Mentor, Did You Volunteer Or Were You Assigned?

Both groups of mentors reported they were interested in mentoring prior to taking on the role. The process for becoming a mentor, however, was different for the two groups. The majority of campus mentors volunteered to mentor new teachers. Six volunteered. Three were assigned as mentors by their administrators. One campus mentor who was asked to mentor responded "I enjoy sharing what I have learned. Also I remember how little support I got as a

new teacher and how much I did appreciate the little mentoring I did receive.” Another campus mentor, who volunteered to mentor, stated “I volunteered since it is my unofficial job in the department anyway.” Two were approached by lead teachers. One campus mentor reported “I saw how supportive the mentoring atmosphere was last year and wanted to be a part of that positive change.”

In contrast, the university-based mentors were all recruited by school administrators or central office administrators. One university mentor responded “I fell into mentoring...I had worked with several student teachers in the past and was interested in taking it to the next level.” A university mentor that was selected by her principal stated “I had seen first year teachers struggle in the past and have always tried to assist them.” Three university mentors reported they were ready for a change. One stated “I had been teaching for 25 plus years and I was ready for a change...a chance to help the next generation of teachers grow.” Another reported “I have worked with student teachers in the past and enjoyed helping new teachers...I thought this change would help fuel that passion.” Another mentor who felt she was ready for a change stated “I felt I had more to offer to new teachers...I feel I have mastered teaching students and I wanted to take it to the next level by teaching my colleagues.” The reasons for serving as a mentor differed among participants; however, all of the university mentors were recruited. A significant difference between the two groups of mentors was the fact that university mentors mentoring assignments differed in that they were moved into full time mentoring roles rather than adding mentoring to their campus roles and responsibilities.

Open-Ended Question #2- What Do You Recall Knowing Or Understanding About Mentoring Prior To Your Current Mentoring Role?

Campus mentors and university based mentors answers were very similar. Both groups felt mentoring required a great deal of support and encouragement. However, some campus mentors felt that mentors should only provide support and encouragement but did not feel their role should be evaluative. One campus mentor believed they should “guide not supervise.” Another campus mentor felt “mentors need to be someone who is nonjudgmental and is just there to listen.” Another reported “I did not think I needed to supervise...my role was to offer guidance and offer advice.” Three of the campus mentors felt their most important role was to listen to their mentee. One mentor stated “I think my most important job is to be there to listen to them during their most stressful times...that is why I am there, to listen not judge.” Another stated “I had a very stressful first year because I did not have anyone to listen to my problems...I was all alone...I need to be there to listen to my mentee so that they do not feel alone.” The third mentor who felt listening was important reported “sometimes new teachers just need a sounding board...they need someone to listen to their struggles and listen to their successes.”

Five of the campus mentors reported their most important role was to support and encourage the new teacher. One reported “the best way for me to support my mentee is share my experiences and help them avoid some of the pitfalls I experienced as a new teacher.” Another provides support by “encouraging them when they do the right thing...they need to know when they did it right, so that they can do it again.” One mentor reported “I have noticed many new teachers leaving after only a few years...maybe if someone had been there to offer support and encourage them they would not have left.” One mentor stated “a new teacher’s greatest need is support...they need to know who to ask when they need help and where they need to go to get all

of the resources they need...that is my job to help them find the right people to help them get what they need.” Finally, a campus mentor who feels support and encouragement is important stated “my goal is to make sure they feel supported...I am their go-to person when they have their ups and downs during that first year, I need to be there to see them through.”

University mentors agreed that there should be some form of evaluation. University mentors expressed the need to provide support as well as provide feedback as a result of observations and evaluations. A university mentor stated their role should be to “help new teachers process difficult situations as a part of their development.” Another university mentor expressed the belief that mentors should “provide honest feedback...yet be supportive of their efforts.”

Four of the mentors used the word coach when describing their role as a mentor. One stated “I am a natural coach...mentees need someone to teach them how to play the game of teaching.” Another reported “I always thought mentoring and coaching went hand in hand...everyone needs someone help them through new experiences.” Another mentor who used coaching to describe their role stated “We are all on a team, both literally and metaphorically...and every team needs a good coach to help them succeed.” The fourth mentor who mentioned coaching felt “mentors are a lot like a coach; they need to recognize weaknesses and help the mentee combat those weaknesses.”

According to the literature, cognitive developmental training requires a balance of support and challenge. University mentors as a result of their training recognized the need for the balance as reflected in their responses. Five of the nine mentors discussed the need for a balance between support and challenge. One mentor reported “mentees need more than just support...they need someone who can support them while helping bring them to the next level.”

Another reported “support is easy but challenge is hard...however, both are vital to a mentee’s success.” One university mentor reported “balance is key...mentees need an equal amount of support and challenge.” The fourth mentor who mentioned the balance stated “mentors are ultimately responsible for the mentee’s development...that development can not occur without providing a balance of support and challenge.” The final mentor stated “balancing support and challenge is a necessary part of mentoring, however, the task can be very difficult.”

Open-Ended Question #3- Describe The Preparation/Training You Received As A Mentor. What Ongoing Support Do You Currently Receive?

Campus and university mentors both received training, however, the type of training and the amount of training they received differed. All of the campus mentors reported attending a one day workshop provided by their district. This was a one-time training and had no follow up course. All nine also reported attending monthly meetings to discuss the progress of their mentees. Only one campus mentor reported attending an additional training at the region education service center.

University mentors all completed the Collaborative for Learning Development Mentoring Institute at the CDLR (Center for Learning and Development) at Texas A&M University. The Collaborative for Learning Development Mentoring Institute was a year long institute with various sessions throughout the year. Five of the university mentors also reported receiving cognitive coaching. One mentor reported attending Ginger Tucker mentoring workshops while another reported attending a Jim Knight mentoring session. One university mentor reported attending a Critical Friends Coaching seminar. All of the university mentors received extensive training through the university and many also received additional training sessions in regards to mentoring through their Region Education Service Center.

Open-Ended Question #4- What New Knowledge Or Understanding Do You Have As A Result Of Your Current Mentoring Role?

While both groups of mentors reported to have gained some new knowledge as a result of their mentoring, what they gained and how much they gained differed. Campus mentors reported gaining a better understanding of what is required of a new teacher to start the year and how to help mentees handle the day to day responsibilities. One mentor stated “I now have a better understanding of what I need to provide at the beginning of the year...most of our conversations dealt with lesson plans, policies and procedures...someone has to teach them how to organize their classroom.” Another reported “it is vital that we lend them a helping hand with things like lesson plans, classroom management, grade books and etc...they don’t teach you that in college.” Campus mentors reported they had forgotten what it was like to be a new teacher and would try to provide more preemptive strategies for the mentee next year. One mentor reported “I had forgotten how it was to set up my room and my files my first year...the setup of your classroom can make a big difference in classroom management. New teachers may not know the best way to organize their room.” A campus mentor stated “Teachers have different needs versus when I first started...I have to be open to what they are going through.” Campus mentors also learned they must also provide emotional support. One mentor reported “I learned I need to do a better job of helping my mentee work through the cycles of their emotions, you can experience several in just one day.” Another reported gaining “a better understanding of helping my mentee deal with all of the difficulties they encounter during that first year...what may seem like a small difficulty to an experienced teacher seems like an immovable obstacle to a new teacher.” Another reported “I have a better understanding of the expectations administrators have on new teachers and have learned from their stories.” One mentor reported

to gaining no new knowledge. The mentor stated “the experience just backed up what I already knew about mentoring.”

The university mentors reported that they now felt they had a better understanding of adult learning and reflective practice. They reported they would use this new knowledge to better meet the needs of the new teacher and “meet them where they are...bring them where they need to be by providing both support and challenge.” Three university mentors mentioned reflection in their responses. One of the university mentors reported “learning more through their journaling and reflecting...which helped me to change my approach.” Another stated “journaling helped me see the classroom through my mentee’s eyes, it also helped me process how best to help my mentee.” Another stated “reflection is key part of mentoring...it helps both parties stop and reflect on their understanding of the complexities of teaching.” Other mentors reported gaining a better understanding of adult learning. One mentor reported “learning about how adults learn helped me approach my mentees differently...some were at a higher level than others, and as a result of my knowledge about adult learning I was able to tailor my advice to meet the mentee at their level.” Another stated “during our training we looked at how adults learn...I found it fascinating...it changed my tactics in dealing with each of my interns.” It is obvious each participant gained new knowledge, however, university mentor’s knowledge appeared to be more in depth and more encompassing of adult learning unlike the superficial “quick fixes’ of the campus mentors.

Open-Ended Question #5- How Would You Describe The Changes In Your Understanding About Mentoring?

The campus and university mentors agreed that new teachers need a great deal of support their first year, however their decision about how to offer this support in the coming year

differed. The campus mentors stated that as a result of their mentor role they learned that each new teacher is at a different level when they start the year. The campus mentors also reported they felt they needed more help from the school administrators. A campus mentor reported the mentoring role “helped me to look back at my own first year from a different perspective, noting what were my biggest concerns and what should have been my concerns.” Another campus mentor reported “when I first went through being a new teacher I had no mentor. I didn’t know why I felt as I did...now I understand how I felt better, so I can better help my mentees.” One campus mentor reported “I now realize I need to be more compassionate toward my mentee...each of their experiences whether good or bad are all new and they need help dealing with the bad.” One mentor reported “I never realized there could be so much paperwork; especially if the mentee is struggling...I thought that was the administrator’s job.” Another mentor stated “I learned there are some times when I need to move from just listening and start providing help with solving some of their problems.” Another campus mentor reported “I was surprised how naïve my mentee was...I assumed their teacher training would have better prepared them...I had to help fill in a lot of gaps.”

The university mentors believed there is a learning curve and looked for ways to help mentees gain professional development, and help them reach for excellence. A university mentor stated “there needs to be a balance of support and challenge...I also learned better strategies to create that balance.” Another reported “reflection and support and challenge were a big part of my mentorship....reflection helped me process my mentee’s struggles and providing support and challenges helped me ease them through those problems.” Another university mentor reported “gaining a better understanding of adult learning and therefore offer a better level of concern and support.” Another mentor stated “I have become more familiar with

learning styles and I am now better equipped to work with all kinds of mentees.” Another stated “I can see the big picture...I now see my interns as learners...I try to meet them where they are.” One mentor stated “I learned a lot from my intern...I also learned I need to be a stronger advocate for new teachers.” One mentor reported moving their mentorship to the next level. She stated “I now train other mentors...I have a better understanding of how people learn.” Another stated “I will become more responsible with my coaching.” University mentors had a different level of understanding regarding adult learning. They wanted to help develop the mentee, unlike the campus mentors who focused on helping the mentee survive their first year.

Open-Ended Question #6- How Does This Current Knowledge, Understanding Or Changes In Your Knowledge Affect Your Approach To Mentoring Today? In The Future?

Both groups of mentors reported a new understanding of the role of a mentor and each reported ways they would change their approach in the future. The campus mentors planned to take a more compassionate approach in helping the new teacher get acclimated with teaching. One campus mentor made the decision to “become more aware of how to interpret my mentees cycle of emotions.” Another campus mentor stated, “I think that I will be more of an all encompassing listener, advisor and guide.” Another stated “I will be more sympathetic to their needs...little things can seem like big things.” One campus mentor stated they would change the way they organized their responsibilities as a mentor. They reported “I will do a better job of leaving a paper trail...especially if my mentee has several difficulties.” Two mentors reported changing their style of preparing their mentee. One stated “I will help my mentee be better prepared by being more proactive.” Another reported “I will help them acclimate themselves better, so that problems can be avoided later.”

The university mentors reported a desire to better meet the individual needs of their mentee. They planned to help the novice teachers become better problem solvers by practicing and encouraging reflection as well as keeping up to date on current literature regarding obstacles and struggles of new teachers. One university mentor planned to “spend more time reflecting with my mentee...help bump them to the next level.” Another university mentor decided to “take a more full time approach to mentoring by staying knowledgeable in current literature regarding mentoring...increase my people skills to better match their style with mine, allowing me to better facilitate their development.” One mentor reported a desire to “be more effective in dealing with a wider range of people...approach each of them differently.” Another stated “there is no one size fits all approach...they each have individual needs. Four of the mentors discussed helping their mentees problem solve. One stated “there is a temptation to solve the problem for them, but to truly help them I need to let them solve the problem themselves...that is where the true learning is.” Another discussed “better equipping my intern to problem solve...problem solving skills are just as important as lesson planning skills.” One mentor stated “one of the best challenges to provide is allowing the intern to problem solve...solving it for them only provides support.” Further, one mentor stated “one of the greatest skills I can equip my mentee with is problem solving...that is when you see the most growth.” Three of the university mentors discussed the role of supervision in their mentorship. One stated “I see them as my colleague but realize I must also be their supervisor.” Another reported “non-judgmental reflection is important, but I must also serve in a supervisory role by assessing and evaluating them through observations.” Finally, another stated “as their supervisor I can offer a better plan to help my mentees...I can provide them support while providing them with honest, appropriate feedback.”

The university mentors focused on mentee development while the campus mentors were focused on emotional support.

Open-Ended Question #7- Using A Metaphor, Describe Your Mentorship. (ex: Flower Blooming)

The campus and university mentors listed various metaphors to describe mentoring. The element of change was a common element. The campus mentor metaphors included quid pro quo, taking a daily dose of vitamins, trail guide, eagle's wings, opening eyes, riding a roller coaster, mutualism, infinite geometric series, and the sun rising. The campus mentor who chose quid pro quo stated she "got so much from the experience...it was an example of I give so I get." Another campus mentor had a similar description when she described her mentorship as mutualism. She stated it was much like a "flower and bee; both benefit and learn."

Some campus mentors described their mentorship as more of a guiding process. The campus mentor who compared mentoring to a daily vitamin believed the mentee needed a daily dose from their mentor to help them through their daily routine. Another campus mentor believed they were a trail guide who must guide their mentee through the forest. One campus participant described their mentorship like eagle's wings which "protect and comfort the mentee to give them the tools they need to soar above and beyond."

Other campus mentors believed their role as a mentor brought about more personal change. The mentor who used the opening eyes to describe their mentorship was actually describing themselves not the mentee. They believed the experience opened their eyes to needs they never knew existed. It would appear their mentorship changed them and not their mentee. Another campus mentor similarly described their mentorship as a sun rising. They believed as the year progressed their mentee became more "acclimated with the building and teaching in general."

They believed the mentee changed not them. Other campus mentors had very unique ways of describing their mentorship. Another campus participant compared mentoring to a roller coaster. They felt their mentee was “naïve and clueless...unprepared and unaware” which made for a very difficult year with many ups and downs. The final campus mentor described mentoring as a geometrical series which is “infinite and the effects grow exponentially, and it seemingly never ends.”

The majority of the campus mentors described mentoring as a one sided experience. The others appeared to understand mentoring as beneficial for both the mentee and the mentor.

The university mentor metaphors included building a foundation for a building, mothering, shepherding, coaching a football team, the life cycle of a butterfly, spinning wagon wheel, weather, fertilizer and an invisible teacher in a classroom. The mentor who described mentoring as building a foundation believed the “process was ongoing...you start with the foundation first and then build until the building is complete.”

Three university mentors described a more nurturing experience. One who believed mentoring was like mothering stated a mentor must “listen...teach...and sometimes discipline” the mentee. Another nurturing description included shepherding. The “shepherd” mentor believed mentors must watch over their mentees, protect them and sometime pull them out of the well.”

Two university mentors described a very supportive role regarding their mentorship. One university mentor depicted mentoring as an invisible teacher in the classroom. The mentee needs to “feel the mentor is there with them in the room at all times...like a child feeling their parents with them at all times...their gentle hand guides them along.” Another participant felt mentoring was like coaching a football team by stating that sometimes the mentor has to “stand back and

reflect on the play...what can they do different...learn to anticipate problems and provide support, then send them back out again.”

Two university mentors expressed themes of growth and change in their descriptions. One university mentor portrayed mentoring as the “life cycle of the butterfly...a metamorphosis must occur to see growth.” A different university participant compared mentoring to fertilizer. The plant is “going to grow regardless...however fertilizer is needed to ensure the plant receives all of the nutrients necessary to grow...if the plant is strong it can endure any hardship.”

Two mentors used very abstract metaphors to describe their mentoring. One used weather to explain her definition. She thought mentoring was like the weather because it was “ever changing...sometimes it was sunny and sometimes it was stormy and the mentor must teach the mentee to be prepared for all types of weather.” A wagon wheel was used by one mentor to illustrate their description of mentoring. She expressed that there were “several spokes in the wheel such as reflection, adult learning, support and challenge...you need all of the spokes to make the wheel turn.”

The university mentors leaned toward metaphors that had variability in their results. The mentor must equip their mentees with many tools to help them grow. The metaphors all hinted at change and development. The university mentors wanted to see true growth which would require the mentees to participate in a developmental process.

Both groups used descriptions that contained some element of change; however the university mentor’s metaphors were more transformational in nature. The mentees did not just change; they changed for the better and their changes were irreversible.

Mentoring Narrative

Each mentor was asked to describe in a narrative their definition of mentoring. The overarching theme of providing support was consistent in the campus and university mentors' narratives. The general definition of mentoring was similar between the campus and university mentors; however the execution of the role of mentor differed.

The campus mentors expressed the need to offer support and encouragement throughout their mentorship. They also believed it was important to provide non-threatening and open communication between the mentor and mentee. They felt offering their experience and knowledge would help the mentees navigate their way through their first year. One campus mentor stated that "a mentor offers knowledge gained through experience and lots of smiles." A mentor should be a "friend who advises and guides another teacher toward their goal." Another campus mentor defined mentoring as "passing along awareness of success while providing a safe haven for failure to result in ultimate growth." Three of the mentors used the word counselor in their definition. One said a mentor "is a trusted counselor...someone you can trust." Another described mentors as "counselor and guide, who provide non judgmental support." Another campus mentor defined a mentor as someone who served "as a trusted counselor, listening to all needs and providing the advice and tools necessary to help the new teacher effectively reach her students, communicate with colleagues and supervisors, and discover her own worth." Four of the campus mentors described mentoring as a means for providing resources to the new teacher. One said that "mentors should be a resource for new ideas...someone who helps guide them through the pitfalls." Another defined mentoring as a way to help "acclimates the new teacher to teaching...even if it means helping them find the copy machine." One mentor believed the mentor should "show a polished professional demeanor and a warm friendly personality and

provide their mentee with all of the resources they need to be successful.” The fourth mentor who discussed providing resources, stated mentors help “guide them through every day tasks...providing all the instructional materials and resources they might need in their lesson planning and execution.” Two mentors believed mentoring requires the mentor to use their years of experiences to help the new teacher. One mentor stated that “mentoring is an experienced teacher teaching a non-experienced teacher...you can’t learn everything in a book.” Another campus mentor stated that mentors should “share their experiences so that they can facilitate positive outcomes.” The campus mentors all believed mentoring should be a positive experience for both the mentor and the mentee by providing support and encouragement.

The university mentors also stated that the need for providing support; however, they believed it should be a balance between support and challenge. An example of this was explained by one mentor who stated that “support involves listening to and acknowledging the feelings of the novice...challenge involves helping the novice look beyond where he/she is currently.” One university mentor believed mentoring “has to be a balance of support and challenge in order for growth to occur...challenge only would be discouraging and support only would not promote development.” Another example of challenge and support is the comment that “walking with a new teacher giving encouragement, support and advice when needed...there is a fine line when it comes to knowing when to give suggestions and when to help them come up with solutions to their problems...we are their advocate.” Another university mentor believed mentoring “is providing appropriate support so that adult behavior can be changed to be more productive, effective and efficient. Mentoring sometimes requires intervention on different levels.”

Teaching problems solving through modeling and reflection was also a theme found throughout the university mentor's narratives. One mentor stated that a mentor "must help a mentee reflect upon a situation, coach them through the problem solving process and reinforce through conversations about positive growth." Another affirmed that a mentor should "be able to model good communication, problem solving and reflection to help influence a mentee to grow personally and professionally."

Three university mentors used the word mother to describe mentoring. One stated that "mentors are like mothers...they must provide nurturing and wisdom." Another believed "mentoring a new teacher is like mothering in that you have to be there for all the ups and downs and provide the right amount of comfort." Another mentor who used mothering to describe mentoring said "mentors are like mothers...we often work behind the scenes, but if we have done our jobs right, we can one day step back into the shadows and watch our child/mentee shine."

A different perspective was reflected in a university's mentor's belief that mentors "should be listeners, instructional coaches, guides, facilitators and help make connections to new learning." Another university mentor believed mentoring is "walking with a new teacher giving encouragement, support and advice when needed." These are both examples of mentors who believe mentors need to guide, supervise and challenge.

The campus and university mentors both believed new teachers need support during their first year. They each provided their own definitions of how they think that support needs to be distributed. The university mentors also believed the new teachers need both support and challenge, therefore their definitions and descriptions were different.

CHAPTER V

SUMMARY AND RECOMMENDATIONS

Discussion

The purpose of this study is to investigate differences found in the perceived self-efficacy of mentors who were trained using a cognitive developmental model of mentor training with mentor teachers who have received little or no training. The researcher used two questions of interest to guide this study.

1. What differences exist in the perceptions of teacher mentors who received cognitive developmental mentor training and those who received little or no training based on indicators for teacher self-efficacy?

2. What differences exist in the perceptions of teacher mentors who received cognitive developmental mentor training and those who received little or not training based on responses to open-ended questions?

The researcher anticipated that those with cognitive developmental training would have demonstrated perceptions indicative of high teacher self-efficacy. The researcher also anticipated those with cognitive developmental training would be more knowledgeable about mentoring and adult learning. The discussion below states the findings of the study as well as the correlation between the anticipated results and the actual results.

Two groups of mentors participated in the study. One group consisted of university mentors involved in Texas A&M University's Teacher Internship and Induction Program. The mentors completed Cognitive Developmental Mentor Training through Texas A&M University's Mentoring Research Collaborative for Learning and Development. This training included both introductory and on-going professional workshops addressing mentoring practices.

The university mentors were comprised of teachers from various suburban school districts hired through a collaborative interview with a team from the university and the participating school districts. The mentors were required to have a Master's degree and at least 5 years experience in the district, although the mentors in this study all had more than 10 years teaching experience. In addition, they were respected teachers with strong mentoring skills who were required to act as liaison between the university, their school district, and the interns. The university also required the mentors to conduct seminars with interns in the areas of classroom management, organization, teaching styles and other issues during their mentorship. The mentors were also to assist their mentees with crises or emergencies when needed. Further, the university required the mentors to guide the intern's growth in reflective thinking and self-evaluation and to work with the campus administration to facilitate professional growth, strengthen weaknesses and encourage the success of the mentees. Each of the university mentors were trained through the workshops offered as a part of the mentoring research collaborative through the university.

The campus mentors included volunteers and mentors assigned by each individual school's administrators. This discretion on the part of campus administrators resulted in varying experience levels for the mentors, although all had taught at least five years. They may or may not have taught the same subject/grade level as their mentee. To provide a common experience, the campus mentors were required to attend a one-time district mentor training session. According to the Director of Professional Development for the district, the training consisted of a description of their role as a mentor and their responsibilities during their mentorship. They were given a binder of all of the required paperwork they needed to complete during their mentorship, such as logs of when they met with their mentee and classroom observation

monitoring sheets. The mentors were trained on how to complete each form. The training also included a discussion of typical first year teacher struggles and ways to help the mentee. The training did not include any information about adult learning or reflective practices. The suburban school district was one of the districts the university worked with in conjunction with its Teacher Internship and Induction Program; however, the campus mentors received minimal formal training from their district

There were other difference between the university and the campus mentors. One was that the campus mentors did not interview for the position nor did they necessarily have mentoring experience. While two-thirds of the campus mentors had mentored in the past; others were mentoring for the first time. It is important to note that the campus based mentors were all still teaching, while the university mentors were full time mentors and did not have traditional teaching responsibilities. The campus mentors primary responsibility was their classroom, and therefore they were a teacher first and a mentor second.

The university and campus mentors both completed three components during the study. The first component was a survey instrument developed by the researcher and based on questions used to determine the self-efficacy of teachers titled “Mentor Efficacy” and appearing in Appendix A. The second component was either a personal interview, in the case of the university mentors, or an open-ended survey, in the case of the campus mentors. The same questions were used for the interviews and the open-ended survey and appear in Appendix B. The third component was the completion of a mentoring narrative. The prompt for this narrative is Appendix C. Following is a discussion of the results from the different components of the study.

“Mentor Efficacy” Survey

The questions from the “Mentor Efficacy” survey appear in Appendix A. The responses of the university and the campus mentors showed no measurable difference in the perceptions of the two groups. The assumption by this researcher that mentors trained in Developmental Mentoring would receive higher scores on indicators used to establish self-efficacy was not supported by the results of the “Mentor Efficacy” survey.

Statement One

Statement one addressed whether or not the mentors felt that they had received enough training to deal with most new teachers. Both groups felt their training had been adequate.

Statement Two

When asked in statement two whether or not they felt capable of “usually helping to solve problems expressed by their mentees,” campus mentors felt more confident about their ability to help mentees problem-solve. According to the literature, many “mentors were convinced that novices only wanted emotional support, help with management, quick fixes, and day to day information” (Stanulis, Burrill & Ames, 2007, pg. 143). This perception may account for the high level of confidence from the campus mentors for statement two. The campus mentors may have been indicating that they felt that they had a “quick fix” to offer the mentees. Stanulis showed that mentees, however, actually “long for conversations about practices that mentors are ignoring” (Stanulis, Burrill & Ames, 2007, pg. 143). University mentors may have recognized, as a result of their extensive training, that they would not always have a quick fix to help their mentee and that this was to be expected and perhaps even desirable in that deeper discussions might develop between the mentors and the mentees as they struggled with issues that resisted the “quick fix.”

Statement Three

Statement three asked mentors to address the statement that mentors “are not a very powerful influence on mentee performance when all factors are considered.” Most mentors seemed to realize the reason behind providing a mentor to a new teacher. Many remembered how they too struggled during their first year of teaching. One campus mentor stated in her written response to the open ended questions “I was reminded of what it’s like to be a new teacher so I can more closely identify with my mentee.” In both groups, participants would not have agreed to be mentors if they did not feel they could help someone. Belief in the need for and ability of mentors to make a difference would be essential in those accepting the position. This belief may account for their similar responses.

Statement Four

The fourth statement addressed the ability of the mentor to implement a teaching concept. Each mentor felt they had some influence on their mentee’s ability to deliver a concept, yet they did not feel comfortable enough to “Strongly Agree” with this statement. That may be because they did not have enough confidence in their ability as instructional leaders. Stanulis, Burrill and Thies-Ames (2007) believe “mentors need to move beyond providing support as in “how’s it going?” and into complex and thought provoking conversations that surround the practice of teaching” (Stanulis, Burrill & Thies-Ames, 2007, pg. 144). Since neither group received training targeting instructional leadership, this lack of training may have been reflected in their responses.

Statement Five

Statement five read: “Even a good mentee with good teaching abilities may not reach many students.” According to the data, the university mentors appear to have more confidence in the mentee’s teaching ability. Heller and Sindelar (2003) found that the quality of teaching

improves for both the mentor and the mentee teacher because as mentors assist their mentees they also improve their own competency. Perhaps the university mentors' confidence in their mentee's abilities was at a higher level than that of the campus mentors because their confidence in their own abilities was higher. Being selected by the university as a mentor was a confidence building experience that increased the confidence of those selected and extended into their beliefs about their mentees.

Statement Six

Statement six addressed whether or not the mentors felt they could assess the competency level at which the mentees were working. While all of the participants felt they could assess the competency level of their mentees, the campus mentors had stronger agreement with this statement than the university mentors. This result was unexpected. Results indicated that the university mentors who had received training regarding the theories behind conceptual development felt less confident in assessing their mentees' conceptual level. This may be because they had a greater understanding of the conceptual levels and therefore felt less comfortable in labeling their mentee's conceptual level. The campus mentors had had no training regarding conceptual development, yet feel confident they could identify their mentees' levels. This may be an example of the folk saying that "they don't know what they don't know," meaning that if campus mentors were unfamiliar with conceptual levels than they may have had an inaccurate definition of conceptual levels and believed that they had a greater influence on their mentee's abilities as a result of this inaccurate definitions.

Statement Seven

Statement seven read: "If I try really hard I can get through to even the most difficult or unmotivated mentee." According to the data, the majority of the mentors agreed with statement

seven, however campus mentors had a stronger association with agreement than university mentors. Campus mentors, as aforementioned, did not have training in conceptual levels. Without information to guide them, they may have felt that they could help any mentee, even those who were at the lowest conceptual level. Because they did not have an understanding of definitions of conceptual levels, they felt they could help their mentee even if they were unmotivated. Strategies for moving mentees from a lower conceptual level to a higher conceptual level are different. According to Reiman and Sprinthall (1998), mentees at a lower conceptual level require more structure. According to Reiman and Sprinthall's suggestions, it was not the effort on the part of the mentor that moved mentees on a lower conceptual level to a higher level, but the implementation of more structured activities.

In contrast, the university mentors, as a result of their training, may have felt that they could recognize their mentees who were at a low conceptual level and required more structure to move to the next level. Not only could they recognize them, but they knew what steps to take to move them to a higher conceptual level. As a result of their cognitive developmental training the university mentors had an understanding of the meaning of "conceptual level" and an understanding that the mentor's effort cannot change a mentee's conceptual level. They understood that they needed to meet their mentee at their current level before working with them to bring them to a higher level. These levels are defined as personal and refer to a person's "current preferred style of solving problems in human interactions" (Reiman & Thies-Sprinthall, 1998, pg. 49). This statement suggests that the effort on the part of the mentor will change the behavior of the mentee. The university mentors, as a result of their training, may have realized it does not require more effort on their part, but instead requires a different strategy to help move the mentee from their current level to the next level.

Statement Eight

Statement eight read: “When it comes right down to it, a mentor really can’t do much because most of the mentee’s motivation and performance depends on his or her training.” All of the campus mentors disagree with this statement yet two of the university mentors agree with the statement. This result was unexpected. The university mentors appear to have less faith in their ability to help motivate their mentees. This may simply be an error on the part of the mentors because one of the university mentors, who agreed with this statement, also agreed with statement seven which states that they believe if they try really hard they can help their mentee. These two answers are contradictory. It could be that the university mentor may have misread the statement.

Statement Nine

Statement nine was “My mentor training program and/or experience has given me the necessary skills to be an effective mentor.” According to the data, the university and campus mentor’s selections were very similar with only slight differences. It would appear that each set of mentors believed they had received the necessary training to be an effective mentor. Each group of participants received some level of training, therefore one could assume they felt they had all of the knowledge they needed to be an effective mentor. All of the mentors were experienced teachers. Most were recruited or recommended as mentors and could be assumed to have had a higher level of confidence in their teaching abilities. This confidence may account for their level of confidence in their mentoring skills. It may also be that they had no reason to doubt that their training was adequate.

Statement Ten

Statement ten read: “If a mentee lacks classroom management skills; I feel that as a result of my training, I know some techniques to help him or her regain control.” According to the data, most mentors believed they had enough training to assist their mentees with classroom management, however, more campus mentors felt a stronger association to agreement than university mentors. The campus mentors received little training in the area of mentoring. As experienced teachers, however, they had knowledge of classroom management. It is possible that they did not separate training as a specific activity from the training their years of experience had given them.

According to the literature, the goal of mentoring should be to help the mentee problem solve and make their own judgments regarding classroom management, not just provide answers. Orland-Barak’s research (2009) regarding reflection suggested that “the role of the mentor is not that of an external agent providing solutions to educational problems, but that of a participant and facilitator whose task is to assist teachers to arrive at sound practical judgments” (Orland-Barak & Rachamim, 2009, pg. 602). Statement eight assumed that the mentor felt the success of their mentee was a result of the mentor’s knowledge. However, according to Orland-Barak & Rachamim, the mentor must only assist and facilitate the learning of the mentee to help the mentee reach their own conclusion about how to improve their level of skills. The university mentors, who had received developmental training, may have recognized the need to help their mentees reach their own conclusions in order to ultimately produce a higher level of instructional growth. The campus mentor may have felt their role was to provide answers.

Statement Eleven

Statement eleven read: “As a result of my training, I can help my mentee improve his or her teaching.” According to the data collected, the mentors’ responses were evenly divided between the two groups. The responses indicate a very strong association with agreement on statement eleven. Both groups of participants feel they had the ability, as a result of their training, to improve the teaching of their mentee. All of the participants agreed to mentor, therefore, indicating that they felt that their mentoring would provide some benefit to the mentee.

Statement Twelve

Statement twelve read: “I can enhance collaboration between the mentees and the administration to make the induction process run effectively.” As a result of the data all of the mentors agreed with statement twelve in some form, however, university mentors had a stronger agreement with statement twelve. University mentors received cognitive developmental training that discussed the need for support and challenge as well as providing adequate feedback. According to Reiman and Thies-Sprinthall (1998), what made this condition, of support and challenge, difficult was the mentor’s ability to recognize the level of their mentee and their ability to provide the appropriate challenge. The mentor must be prepared to assume this role of responsibility as each mentee required a different amount of support versus challenge depending on which stage of development they had reached. In order to adequately provide challenge and feedback, mentors took on the role of supervisor. By assuming the role of supervisor, mentors gained a better understanding of how administrators monitor the progress of their teachers. This understanding helped the mentors more effectively communicate with administrators in regards to the needs of their mentee. Since university mentors have this understanding of balance

between support and challenge, this may explain why they were more likely to agree with statement twelve.

The quantitative nature of the instrument made it difficult to dig deeper into the mentors' true feelings toward mentoring and their training. Both groups of mentors, according to the data, would appear to agree with these statements that are components of self-efficacy. Initially, it would appear there was little difference in perceptions regarding mentor self-efficacy between those who received cognitive developmental training and those who did not. Bandura (1993) believed those with a higher self-efficacy level felt they had more control of their surroundings. In Bandura's work, those teachers who believed they had control had higher self-efficacy, while those who felt variables were out of their control had lower self-efficacy. This facet of self-efficacy was not reflected in this study as there was no statistically significant difference between the total mean scores for the campus and university mentors. It should be noted, however, that the "Mentor Efficacy" survey limited their response to each statement. They either agreed with the statement or disagreed and were not able to explain their response. This structural component prevented the mentors from revealing their knowledge of mentoring. For this reason, the researcher also included two qualitative pieces to dig further into the mentor's thoughts and feelings about mentoring.

The researcher initially felt there would be no significant difference between the two groups, because all the participants seemed to be strong and capable mentors. This expectation was fostered by the fact that the majority of the participants volunteered or were recruited to mentor. No one was forced to be a mentor, so each participant already had some level of vested interest in being a successful mentor. The researcher believed this vested interest resulted in the similar responses given by each mentor group to each statement.

Open Ended Question Responses

The second component of the study included an interview with each university mentor composed of seven open ended questions. A written response to the same seven questions by the campus mentors was also obtained. Both groups completed the questions after they completed the self-efficacy instrument. It was through the answers to these questions that the researcher began to see differences between the two groups.

Open-Ended Question One

In question one, mentors were asked how they came to mentor. As previously stated, the majority of the campus mentors volunteered to mentor. Some were recruited first and then volunteered, and others volunteered when the opportunity was offered.

Open-Ended Question Two

In question two, when asked what they recalled knowing and understanding about mentoring, the campus mentors stated that they understood that mentors provided support and encouragement, but did not evaluate the mentee. In their words, they believed they should “guide not supervise.” The answers of the university mentors differed. They agreed that mentors must offer support, but they also believed they must provide feedback in the form of evaluations and observations. One university mentor stated that, “I must also serve in a supervisory role by assessing and evaluating them through observations.” Another stated that, “as their supervisor...I can provide them support while providing them with honest, appropriate feedback.”

In contrast, the campus mentors did not believe their role as mentor involved supervising or evaluating. One campus mentor stated that, “I never realized there could be so much paperwork...especially when documenting poor teaching performance...I thought that was the

administrator's job." They believed supervising and evaluating should be left up the campus administrators.

The university mentors, on the other hand, realized that they must assess their mentees and provide feedback. One university mentor stated that, "I must also serve in a supervisory role by assessing and evaluating." It appears that their training resulted in different understandings between the two groups of the roles a mentor must play. The university mentors, through their training, appeared to have a broader understanding of what roles mentors must play.

Open-Ended Question Three

Question three asked the mentors to describe their preparation and training. The training received by each mentor group was different. Campus mentors attended short one-day, workshops on mentoring. This was the extent of their training. Other the other hand, all of the university mentors received cognitive developmental training through the Mentoring Research Collaborative through Texas A&M University. The training occurred over a year with numerous sessions spread throughout the year. As a part of the institute, university mentors received information on adult learning and reflective practices. The training included the theories of conceptual complexity, ego development and moral development, which are discussed in detail in the literature review. The training also addressed the five components of mentoring designed by Spinthall and Thies-Sprinthall and discussed in detail in the literature review. Finally, some university mentors chose to complete cognitive coaching in addition to the training provided by the university. Their knowledge of mentoring and adult learners was significantly greater than the campus mentors and thus their approach to mentoring was quite different.

Open-Ended Question Four

In question four, mentors were asked to discuss any new knowledge or understanding they had gained as a result of the mentoring role. The knowledge the mentors reported gaining as a result of the mentoring was also different. Campus mentors reported gaining a better understanding of what new teachers were lacking in terms of preparation. One campus mentor stated that, “I forgot what it was like being a new teacher...how naïve and clueless new teachers are.” Other campus mentors reported learning how to stay more organized and how to keep up with required documents for mentees and their supervisors. The campus mentors focused on how they could help the mentees keep up with daily responsibilities and required documents; however, they did not mention how to help the mentee as an adult learner, and therefore mentioned nothing about the mentees’ professional growth and development.

The majority of the university mentors reported learning about each individual mentee and saw them as “new learners”. Several reported gaining a new understanding of meeting each mentee where they were rather than giving each mentee the same level of support and challenge. One university mentor stated that “I gained a better understanding of their concerns through their journaling and reflecting...using their journals, I worked with them to change their behaviors.” The campus mentors focused on how they could help the mentees with their day-to-day responsibilities while the university mentors focused on how they could develop the novice teacher.

Open-Ended Question Five

In question five mentors were asked to describe the changes in their understanding about mentoring. Both groups of mentors reported gaining new knowledge as a result of mentoring, however, their changes in their approaches to mentoring were quite different. The campus

mentors stated they would be more sympathetic and be a better listener following their experience as a mentor. They also reported a desire to be more proactive. A campus mentor stated that, “I will try to be more sensitive...and remind them they are not going to be perfect, and that’s ok.” It would appear the campus mentors focused more on helping and pleasing the mentee, rather than improving the mentee.

The university mentors reported the desire to learn more about the individual mentee and their particular needs so that they could help them problem solve and could provide appropriate resources for their mentees. One university mentor stated that, “There is a temptation to solve the problem for them, but to truly help them I need to let them solve the problem.” Another stated that “one of the greatest skills I can equip my mentee with is problem solving.” Both mentors realized the mentees will have problems during their first year, however, the campus mentees only reported offering support during those problems. In contrast, the university mentors discussed equipping their mentees so that they could solve the problems themselves.

Open-Ended Question Six

In question six, mentors described how their approach to mentoring would change as a result of this new knowledge. The university mentors also stated they would continue using the reflective practice. One mentor stated that, “I hope to spend more time reflecting with the mentees...to hopefully bump them to the next level.” Another university mentor stated that, “reflections helped me process my mentee’s struggles.” Another university mentor reported that, “journaling helped me see the classroom through my mentee’s eyes. The university mentor’s goals were not to help the mentee “make it through the year” but to develop them into better teachers by challenging them and pushing them to the next level. The campus mentors made no mention of reflection, possibly because their training did not discuss journaling and reflection.

University mentors also reported a desire to stay more current on mentoring and teaching literature. The university mentors believed the more they knew on the subject the better prepared they would be to assist their mentees. One university mentor stated that, “It is important to stay current on the literature surrounding our craft so that we can better equip our new teachers.” Consequently, the campus mentors believed the mentees were not prepared, yet did little to prepare themselves for the mentorship. One campus mentor stated that, “I was surprised how naïve my mentee was...I assumed their teacher training would have better prepared them.” The campus and university mentors defined and approached mentoring differently and therefore their thoughts on what they learned and how they planned to change differed.

Open-Ended Question Seven

In question seven, each mentor was asked to describe their mentorship using a metaphor. As the researcher expected, the metaphors differed between the two groups even though each metaphor had the theme of change. Some examples of responses by campus mentors referenced “daily dose of vitamins, opening eyes, guiding, sun rising, and spreading wings.” Examples of university mentor metaphors included “constructing a building, mothering, shepherding, and coaching.” As aforementioned, each metaphor described a change; however, it would appear that the university mentors’ metaphors were more transformational in nature. They did not just change; they changed for the better. Ganser (1999) states:

The figurative language used by teachers to describe their experience as mentors is useful in elucidating the complexities of mentoring and the mentoring relationship. For example, there is an important difference in the personal investment

in mentoring as raising a child and someone else who sees
mentoring as jump-starting a dead car battery”

(Ganser, pg. 43).

The metaphors used by the campus mentors dealt with change, but the change appeared to be on a superficial level, while the university mentors’ metaphors were more profound.

Mentoring Self Analysis Narrative

The final piece of data was a “What is Mentoring?” narrative. In these narratives, mentors described what mentoring meant to them. The thoughts in the narratives mirrored what they said in responses to the open-ended questions. The underlying theme in the campus mentors’ narratives revolved around support. Mentoring was described as “encouraging, guiding, listening and assisting.” One mentor stated that a mentor should “be a friend who advises and guides another teacher.” Another campus mentor described a mentor as “a trusted counselor...someone you can trust.” Another campus mentor also used the word “counselor” and defined a mentor as “a counselor and guide, who provides non-judgmental support.” University mentors also listed the same description; however, they believed there should be a balance between support and challenge. One university mentor believed in mentoring “there has to be a balance of support and challenge in order for growth to occur...challenge only would be discouraging and support only would not promote development.” University mentors also included descriptions of empowerment, problem solving, reflection, growth, intervention and challenge. One university mentor stated that mentors should “be able to model good communication, problem solving and reflection to help influence a mentee to grow personally and professionally.”

Both groups agreed mentees needed support, however, university mentors believed they must also challenge the mentees in order to bring them to the next level. According to the university mentors, this transformation could not take place without the balance of support and challenge. In contrast, Reiman and Thies-Sprinthall (1998) believed that change or metamorphosis of the mentor during the year is much like a caterpillar changing into a butterfly; the changes are invariant and irreversible.

Recommendations

After analyzing the data, the researcher concluded that while campus and university mentor's responses to the statements in the self efficacy survey were similar, it was apparent that university mentors had a greater advantage in understanding the complexity of their roles as mentors. Their knowledge and preparations gained as a result of cognitive developmental training altered their perceptions of efficacy and therefore altered their approach to mentoring.

A few recommendations for practice are suggested by this study:

- Teachers who are recruited or volunteered to be mentors need to be trained in mentoring using a cognitive developmental program in order to gain a true understanding of adult learning and growth.
- Administrators need to be trained in mentoring using a cognitive developmental program, both at the district and campus level, so that they can better implement their induction program throughout the district and on each individual campus.
- A lead mentor needs to be assigned at the district level to oversee the training and performance of the mentees. The lead mentor must receive cognitive developmental training and coordinate and organize further mentor professional development opportunities at the district, region, and state level.

- Reflective practice should be a required of both the mentor and mentee during the course of the mentorship.
- Districts should collaborate with universities regarding teacher preparation and the role of mentoring. The mentors should be trained using the cognitive developmental model at the university as the university students enter their last year of course work. The mentors should receive graduate credit for the mentoring courses.

Recommendations for further research based on this study are as follows:

- Utilizing a larger sample, compare perceptions of mentor efficacy of experienced mentors and then require the mentors to complete cognitive developmental training. After training, reassess their self-efficacy so that Analyses of Variance could be calculated.
- Compare perceptions of mentor efficacy of new mentors before and after cognitive developmental training.
- Compare perceptions of mentor efficacy of administrators and mentor teachers who have completed cognitive developmental training. Since their roles are different in the induction process their efficacy levels may or may not differ.
- Investigate conceptual levels of mentors who have participated in cognitive developmental training and how they correlate with the conceptual levels of their mentees.
- Compare performance of the university mentor and campus mentor by asking the mentees to rate both groups.

Summary

In summary, if one were to look only at the quantitative data, it would appear that there was little to no difference between the two groups. However, the qualitative pieces provided a deeper look into the feelings of each mentor group. The campus mentors believed they were effective mentors. They had faith in their ability to help the novice teachers succeed; as do the university mentors. The differences in their feelings and perceptions of efficacy were revealed in their knowledge regarding mentoring. The researcher anticipated that because university mentors had more knowledge as a result of their cognitive developmental training, their perceptions regarding mentor self efficacy and responses to the statements in the survey would differ from the campus mentor's perceptions and responses.

The difference in knowledge level between the two groups was evident in their responses to the open-ended questions as well as in their mentoring narrative. The campus mentors only had an understanding of the first layer of mentoring. They reported the need for support and encouragement; however, they mentioned nothing about a balance between support and challenge. Reflective practice was also absent in their mentoring. The researcher believes the reason they have similar perceptions regarding mentor self efficacy was due to lack of knowledge. They did not know that there are other layers of mentoring that need to be explored and implemented to ensure success.

According to Ganser (1996), many states require specific training for mentor teachers, "which suggests that these roles call for knowledge and skills that teachers may not acquire from work experience alone" (Ganser, 1996, pg. 380). Further, Ganser (1996) stated, "The fact that many of them have not received formal training for these roles suggests that their comfort level in being a mentor may reflect low expectations" (Ganser, 1996, pg. 380). The campus mentor's

expectations were lower and as a result were more easily met, resulting in a similar perception in regards to mentor self efficacy. When the level of expectation is low, the mentor will most certainly meet their expectation. According to Thies-Sprinthall and Sprinthall (1998), if “we wish to raise the cognitive developmental level of teachers as an adult learner these five conditions are requisite” (pg. 72). The five conditions are role taking, reflection, balance, continuity and support, and challenge. The campus mentors only mentioned support. The university mentors, who received the cognitive developmental training, were aware of these five conditions and therefore implemented them into their mentorship. Their expectations were higher, as a result of their knowledge, and therefore their perspective and approach toward mentoring was different.

Bandura, (1993) contended a teachers’ perceived efficacy could shape and alter the course or path they took in life by influencing choice of activities and environments. The knowledge of mentoring was different between the two groups and therefore their perceived efficacy changed the way they approached mentoring. Campus mentors had a high self-efficacy, as did the university mentors. The campus mentors’ perceptions were very different from the university mentors’ simply because their knowledge and understandings were different. While the perceptions toward mentor efficacy were similar, their definition of mentoring was different because their training and preparation were different.

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APPENDIX A

Mentor Efficacy

A number of statements about organizations, people, and mentoring are presented below. The purpose is to gather information regarding the actual attitudes of educators concerning these statements. There are no correct or incorrect answers. We are interested only in your frank opinions. Your responses will remain confidential.

INSTRUCTIONS: Please indicate your personal opinion about each statement by circling the appropriate response at the right of each statement.

KEY: 1= Strongly Agree 2= Moderately Agree 3= Agree slightly more than disagree 4= Disagree slightly more than agree 5= Moderately Disagree 6=Strongly Disagree

- | | | |
|-----|---|-------------|
| 1. | I have enough training to deal with most new teachers. | 1 2 3 4 5 6 |
| 2. | When a mentee is having difficulty with an issue I am usually able to help them solve their problem. | 1 2 3 4 5 6 |
| 3. | Mentors are not a very powerful influence on mentee performance when all factors are considered. | 1 2 3 4 5 6 |
| 4. | If a mentee implements a teaching concept easily, this might be because I knew the necessary steps to effectively teach the mentee how to deliver that concept. | 1 2 3 4 5 6 |
| 5. | Even a good mentee with good teaching abilities may not reach many students. | 1 2 3 4 5 6 |
| 6. | If my mentee couldn't complete a task, I would be able to accurately assess whether the mentee was at the correct conceptual level. | 1 2 3 4 5 6 |
| 7. | If I try really hard, I can get through to even the most difficult or unmotivated mentee. | 1 2 3 4 5 6 |
| 8. | When it comes right down to it, a mentor really can't do much because most of a mentee's motivation and performance depends on his or her training. | 1 2 3 4 5 6 |
| 9. | My mentor training program and/or experience has given me the necessary skills to be an effective mentor. | 1 2 3 4 5 6 |
| 10. | If a mentee lacks classroom management skills, I feel assured that as a result of my training, I know some techniques to help him her regain control. | 1 2 3 4 5 6 |
| 11. | As result of my training, I can help my mentee improve his or her teaching . | 1 2 3 4 5 6 |
| 12. | I can enhance collaboration between the mentees and the administration to make the induction process run effectively. | 1 2 3 4 5 6 |

APPENDIX B

Interview/Open Ended Questions

1. How did you come to mentor, did you volunteer or were you assigned? Describe your level of interest in mentoring.
2. What do you recall knowing or understanding about mentoring prior to your current mentoring role?
3. Describe the preparation/training you have received as a mentor. What on-going support do you currently receive?
4. What new knowledge or understanding do you have as a result of your current mentoring role?
5. How would you describe the changes in your understanding about mentoring?
6. How does this current knowledge, understanding or changes in your knowledge affect your approach to mentoring today? In the future?
7. Using a metaphor, describe your mentorship. (ex: flower blooming)

APPENDIX C

**RESEARCH CODE:****Date:**

Please check or X below:

☐ K-12(Institute) ☐ GRAD L.1 ☐ Southwest Cohort ☐ GRAD L.2 ☐ Internship ☐ Inquiry ☐ General Mentor

Write in the space below, your definition of mentoring:

VITA

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